

THE STATE OF FORENSIC INVESTIGATION IN KENYA

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

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DEDICATION

I dedicate this piece of work to Dr Peter Lineman and his family for the continual support throughout my undergraduate and postgraduate studies through the programme known as Save a Mind Give a Choice. The work is also dedicated to Faith Riunga, Programme Manager, Mercy Mwirigi, assistant programme manager, and John Gikaru the finance manager, of Lewa Education Programme, and all those who enabled me to accomplish the study.

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ABSTRACT

This study sought to explore the state of forensics investigation in Kenya. In specific terms, the study sought to describe the process of forensic investigation, establish the level of training of the experts, examine systems in place for observing human rights and codes of ethics and the challenges faced by forensic investigators in the country. The study was guided by actor network theory which evolved from the interdisciplinary field of science and technology studies that study science and technology as influenced by social and cultural factors.

The study used both exploratory and descriptive research designs. It was conducted in Nairobi County which has eight sub-counties and covered Central Nairobi, Embakasi and Kasarani. The study targeted the practitioners in scenes of crime under forensics in the National Police Service. Critical case sampling was used to select the units of analysis and 12 practitioners were selected through snowball sampling. Information from key informants was used to cross-check the validity of the responses from respondents and to strengthen the findings. Data were collected using semi-structured interviews and key informant interviews. Qualitative data from key informant interviews and semi-structured interviews from the scenes of crime were analysed thematically and the respondent's verbal quotations presented using pseudonyms. .

The study found that the department has not achieved its full potential because of the breakdown in the subsystems, thus rendering it slow and somehow inefficient. The department is not advanced for it lacks modern equipment to handle sophisticated crime scenes and the infrastructure in place is underdeveloped. In addition, due to inadequacy of specialized training for the officers the department faces numerous challenges. The challenges range from individual, institutional and sectional, and are experienced by all officers. These challenges prevent it from meeting the expectations of the public and fails in ensuring there is good evidence to be submitted to court. From the findings it can be concluded that the state of forensic investigation in Kenya is very low for it has not achieved its full potential due to poor infrastructure, lack of standard procedure to be followed, and absence of policies in terms of forensic investigation, poor infrastructure and tools, and inadequacy of specialized experts to handle the scenes. Thus, the study recommends empowering of the experts through training, improvement of facilities, introduction of new technologies, proper funding and clearly outlined policies and codes of conduct.

ABBREVIATIONS AND ACRONYMS

| | |
|-------------|--|
| ANT | Actor-Network Theory |
| CID | Criminal Investigation Directorate |
| DNA | Deoxyribonucleic Acid |
| GSU | General Service Unit |
| KCSE | Kenya Certificate of Secondary Education |
| KIs | Key Informants |
| OCPD | Officer Commanding Police Division |
| OCS | Officer Commanding Station |
| STS | Science and Technology Studies |

CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Introduction

The term “forensic science” encompasses a wide range of disciplines, and each discipline with its own different practices. These disciplines present wide variability in regard to techniques and methodologies. Some of the disciplines are laboratory based (drug analysis, and toxicology), while other disciplines are based on interpretation of observed patterns by the experts (fingermarks, writings, tool marks). Some of the activities requires the expertise of people trained as scientists in analyzing them (chemists or biologists); also there other activities are conducted by both people trained in law enforcement and scientists (blood spatter experts, crime scene investigators, crime reconstruction experts), medicine (forensic pathologists), or laboratory methodologies by lab technologists. Empirical application of science is the main process that forensic scientists use. The main aim of forensic science is to gather intelligence and enable the judge in making decisions in court by means of a scientific approach through evaluation of evidence (Cardinetti and Cammarota, 2005:80).

Crime scene investigation is traced as far as 1750. It is in that year that Henry Fielding created a small group of volunteers in London, referred as the “Bow Street Runners”. These volunteers hurried to scenes of reported crimes and began investigations, thus becoming the first modern crime scene detectives (Swanson *et al.*, 2003:4). Crime scene investigation, as it is known today, dates back to the 17th century in China, where a Chinese team of investigators evaluated crime scenes, examined physical evidence and interviewed witnesses and suspects (Owen, 2000:13). However, it was only during the 1970s that crime scene investigation gained popularity. In the

1970s many court decisions severely constrained investigators in their use of traditional interrogation techniques, and both scientists and investigators had to search for alternative sources to provide them with information. During these new developments investigators realised that the crime scene contains a tremendous amount of information. As a result, investigations today rely greatly on crime scene experts to gather clues and evidence to prove the crime and the suspect's involvement (Lee et al., 2001:20).

The primary obligation of the state is to protect the public from criminality. Thus, it is obligatory for policy makers and policy practitioners in protection of public to ensure the integrity, reliability and effectiveness, of forensic evidence and also enhance public confidence in forensics. Human right requires that this responsibility be discharged with due esteem and reverence for major ethical values. In essence, as society becomes less homogeneous and more risk adverse, forensic practitioners are required to combine ethical sensitivity with scientific rigour (Burrows *et al.*, 2005:5).

Within the forensic community, science is viewed by many as 'value neutral'. Adherence to scientific standards is rightly seen as a safeguard against bias. Science is 'considered uncontaminated with political values and therefore an objective arbiter of truth'. Whilst somewhat idealistic, the proper function of forensic science is to help extract the 'truth'. Thus, many practitioners question if it is appropriate to consider rights, given that forensics arrive at an opinion through 'value neutral' evidence recovery and scientific reasoning (Koppl, 2005:258).

In contrast, criminal justice is inherently 'value-laden' and its administration is beset by competing political, ethical and financial objectives. In the criminal justice system science is,

first and foremost, a means to an end. For example, the expressed aim of the UK Home Office Forensic Integration Strategy is ‘the optimal use of forensic science and technology to reduce crime, bring more offenders to justice and increase public confidence (HO, 2004:10).

Forensic services which are founded upon good science and best practices provide an inherent safeguard for human rights. Moreover, practitioners are well placed to uphold fundamental and longstanding rights such as ‘the right to a fair hearing’. There is an inherent tension between the notion of ‘value free scientific method’ and the conflicting dictates of government policies, which seek to recognize and protect greater religious, ethnic and cultural freedoms whilst being increasingly reliant upon forensic science in the detection, prevention and prosecution of criminality (Donnelly, 2012: 95).

The role of a forensic expert is to testify in court using (if possible) a quantitative measure that evaluates the strength of the evidence. The judge and/or the jury use the testimony as an aid to the deliberations and decisions. Therefore, a forensic expert testifying in court is a witness who presents factual information and offers a professional opinion based upon that factual information; he or she is not an advocate. To be effective, the testimony should be carefully documented and expressed with precision in a neutral and objective manner. Technical concepts should be developed using specific recommendations that take into account the forensic, criminal, legal, and judicial perspectives. Such technical concepts should be articulated in nonprofessional terms such that the judge and the attorneys may understand (Taroni *et al.*, 2004).

All over the world, there are cases of unsolved crime. According to the Associated Press (2011), the Brazilian state has accumulated more than 60,000 unsolved murders in the past decade. The department investigated the matter for the Federal Ministry of Justice as part of a national plan to

improve public safety. The survey showed that 24,000 of the victims had not even been identified. In the United States and in European countries the rates are reportedly around 70 to 80 per cent. This seemingly embarrassing criminal justice conundrum continues to haunt all nations of the world and for the developing nations, these challenges are quite daunting.

Evidence from the United Kingdom clearly shows that more forensic evidence collected at crime scenes results in increased identification of suspects. This has the well-understood multiplier effect that forensic evidence may link several offences through an intelligence-led approach. However, this can only work where the police and the forensic provider work in partnership (Ribaux *et al.*, 2009).

In Nigeria experts have linked many cases of unsolved crimes that dot the Nigeria criminal justice system to absence of forensic evidence. This forensic gap has rendered justice quite ineffective (Oladele, 2006 cited in Ngboawaji, 2012). Nigeria has degenerated to a level where life is seemingly worthless and where serious crimes such as murder continue to remain unsolved by the criminal justice system. The Nigerian police force is charged with the responsibility of maintaining law and order. But, unfortunately, the effort of the police in curbing crime and protecting lives and property has been quite inadequate thereby attenuating the confidence of the public in the police. This aggravated mistrust between the police and members of the Nigerian public adds to the mystery of unsolved murders (Oladele, 2001 cited in Ngboawaji, 2012). The result is a serious dent on the forensic investigative ability of the Nigerian police and other such security agencies. The identification of murder suspects is a critical element in forensic investigation. Onashile argues that police records not based on strong forensic evidence are

largely useless as many criminals will escape detection because names and faces change every day (Onashile, 2009).

South Africa has a relatively new Constitution that was adopted in 1996. One of the rights promised to South Africans under its Constitution is the right to a fair trial. This can only be achieved if, for example, valid DNA evidence is presented in court in an ethical, objective and fair manner. At present the Criminal Procedures Act 51 of 1977 only allows the national (State) forensic science laboratory to perform criminal case work. Although this may change in the future, the current situation implies presentation of DNA evidence in criminal courts by a single institution that is not accredited and which is employing unregulated forensic scientists. Similarly, independent experts are also not regulated, which does not serve justice or assist the legal profession to easily identify credible forensic scientists (Olckers *et al.*, 2013). According to Ndlovu (2006:5) and Zwane (2006) the police in South Africa are not doing their job well when at a crime scene in gathering evidence and, as a result, suspects are released from court because of a lack of evidence. Bower argues that the police officials dealing with child rape cases need special training. She proceeds to recommend that attention should be given to the training of police officials who handle these cases. She also asserts that police officials need to learn how to gather proof properly, and comments that the more thorough a police official is, the more chance there is for a successful prosecution (Bower, 2006).

Forensic services in Kenya are not modelled on the coronial systems of the English speaking regions of the world. The current structure straddles the Police, the Ministry of Health and the Local county council in the cosmopolitan areas. In Nairobi all forensic cases are reported to the police who collect the bodies and transfer them to the City Mortuary. If they are in the

countryside, they are transported to the local hospital mortuaries. Magistrates appointed by the Chief Magistrates in each administrative district carry out the duties of a coroner (Olumbe, 2000). According to Dr Olumbe, the main problem in death-related investigation is that there is no specifically appointed coroner and there is heavy reliance by the judicial system on the police to conduct the death investigations. He points out that dishonesty among the police officers and inadequate pre-colonial investigation by them has culminated in magistrates not having complete control of the investigations. This has led to long delays before investigations are complete and the heavy police workload naturally means little priority is given to criminal or suspicious deaths. Though these cases represent the minority of those reported, police may well not have the time, staff or resources to fully investigate natural or accidental deaths. Also, no set procedures have been established for the investigation. If an investigation is inadequate, then it is difficult for meaningful recommendations to be made at an inquest that may ensue (Olumbe, 2000). Olumbe concludes by saying that forensic services are therefore usually put last on the agenda until there is a crisis involving a case with political connotations.

1.2 Statement of the Problem

For decades, forensic science disciplines have produced valuable evidence that has contributed to the successful prosecution and conviction of criminals as well as to the exoneration of innocent people. Advances in some forensic science disciplines have demonstrated that some areas of forensic science have great additional potential to help law enforcement identify criminals. Those advances, however, also have revealed that, in some cases, substantive information and testimony based on faulty forensic science analyses may have contributed to wrongful convictions of innocent people. This fact has demonstrated the potential danger of giving undue

weight to evidence and testimony derived from imperfect testing and analysis. It would be hard to imagine of any significant criminal investigation today without the contribution of forensic science. However, this does not mean that forensic science is used effectively in the broader justice system. The recently retired Chief Justice Willie Mutunga of Kenya once criticized forensic work for delaying the justice process. This suggests that there are a lot of things which are not in place for forensics to attain their maximum potential in helping solve crimes in Kenya. This raises the concern of whether forensic science is effective and/or efficient in support of criminal investigation in Kenya. The gathering of evidence begins at the crime scene, for it contains visible and hidden information and the investigator should take great care to collect all evidence (Bryd, 2004; Ogle *et al.*, 2004). Each piece of evidence should be identified, collected and preserved as a separate entity (Van Niekrek, 2000; Fisher, 2004). If an investigator at the crime scene is unable to detect clues, interpret them correctly, place their relative association on record, submit them to the appropriate expert and handle them in such a manner as to maximize the examination results, a situation can arise where months of hard work do not bring about the desired results (Adams *et al.*, 2004). Therefore this study explored the state of forensic investigation in Kenya by seeking answers to the following questions:

- i. How is forensic investigation done in Kenya?
- ii. What is the level of training and expertise for forensic investigators in the country?
- iii. How are ethics and human rights observed in forensic investigations in the country?
- iv. What challenges are faced by forensic investigators in the country?

1.3 Objectives of the study

1.3.1 General objective

To explore the state of forensic investigations in Kenya.

1.3.2 Specific objectives

- i. To describe the process of forensic investigations in Kenya.
- ii. To establish the level of training and expertise of forensic investigators in the country.
- iii. To determine the system(s) in place for observing human rights and code of ethics in forensic investigations in the country.
- iv. To identify the challenges faced by forensic investigators in the country.

1.4 Assumptions of the study

- i. Forensic investigations in Kenya are conducted according to established procedures.
- ii. There is a minimum training for one to be competent in conducting forensic investigations in Kenya.
- iii. Forensic investigations in Kenya are conducted according to rules and regulations which adhere to accepted human rights considerations.
- iv. Forensic investigators in Kenya are faced by some challenges.

1.5 Justification of the study

There should be a reason for doing research; if not, it would be pointless spending money and time undertaking the investigation. The main purpose behind a research is the desire to solve a practical problem or to improve on a procedure. There could be different possible purposes for doing research (Denscombe, 2002:26; Welman and Kruger, 2001:19).

The research site was selected for it has the largest number of scenes of crime officers. Other counties have few officers per county. This implies that it is the place where the information could be obtained conveniently and more so it has the Departmental headquarters and most of the equipment is sourced from this county. In Kenya, there has been a series of accusations from international bodies and human rights activists that forensic investigations are not thorough. This might imply that the justice system sets free many people who ought to be convicted and unfairly convicts those who ought to be free due to lack of sufficient or reliable evidence. The findings of this study are likely to inform the government on how forensic investigation is at the time of study and inform the relevant bodies on the possible actions to take. Few academic studies have been undertaken and published in the field of forensic science in Kenya; the study therefore offers some background against which scholars interested in forensics can use to further their interests. The study should also inform researchers, especially forensic anthropologists, forensic archaeologists, forensic pathologists and forensic toxicologists, on the gaps in the Kenyan system of forensic investigation and their role in the discourse of human rights and ethics.

1.6 Scope and limitations of the study

This study was done in Nairobi City County; it covered Central Nairobi, Embakasi and Kasarani sub-counties with the sample population being drawn from scenes of crimes in the National Police Service. The study was limited to the role of forensics in solving crimes. It focused on the ability of Kenyan forensics to efficiently deliver credible justifiable outcomes. The study did not delve into other forensic issues other than crime. It explored the state of forensics in the duty stations and it was guided by actor network theory. This study used both exploratory and descriptive research designs. It sought to describe the process of forensic investigation, establish

the level of training of the experts, and examine systems in place for observing human rights and codes of ethics and the challenges faced by forensic investigators in the country.

Because of the sensitive nature of the study, area of study and protocols, it was difficult to collect a large amount of data. The focus was conceptual and thematic rather than statistical representativeness. However, the investigator tried as much as possible through proper explanation on the purpose of the study to overcome this. An exploratory research design requires more time in order to discover aspects related to the research theme. This has limited the perceived representativeness of the study.

1.7 Definition of terms

Definitions concretise the intended meaning of a concept in relation to a particular study (De Beer, 1999:15). The following definitions explain the key concepts of the research:

Field officers – These are professionals who visit the scene of a crime and collect the physical evidence that may be related to the crime. They also document and record the scene by taking photographs and videos.

Lab officers – These are technicians who analyse and complete tests on the evidence collected by the field officers.

Forensic investigation- This refers to the use of science or technology in the investigation and establishment of facts or evidence. Its aim is at instituting court proceedings and where some or other scientific knowledge is applied to a legal problem (Pollex, 2001:93).

Crime scene- This is a locality of hidden clues which can lead to the clarification or detection of the crime. It includes any other locality or place where physical clues concerning the crime can be found (Marais and Van Rooyen, 1990:23).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contains the literature review relevant to the research problem. The literature is reviewed using the following subheadings: Forensic science, general forensic procedures and ethics involved in criminal investigations. The chapter concludes by discussing the theoretical framework that guided the study.

2.2 Forensic science

The Oxford English Dictionary lists one of the first uses of the phrase “forensic science” as describing “a mixed science”. The early days of forensic science could certainly be called mixed, when science served justice by its application to questions before the court. Forensic science has grown as a profession from the early 1880s and into a science in its own right in the early twenty-first century (Houck, 2007:2).

Forensic science describes the application of scientific methods and knowledge to legal problems. A fundamental principle of forensic science has been popularly summarized by the phrase ‘every contact leaves a trace’. This phrase has been termed Locard’s Exchange Principle in reference to forensic scientist Edmond Locard, who was a pioneer in the area of trace evidence (Gardner, 2005:25). This is the fundamental assumption on which crime scene investigation rests. The principle states that every time objects come into contact with each other there is an

exchange of information; in other words, there will be some sort of gross contamination. This information could be in the form of finger marks, hairs, fibers, soil or blood (Siegel, 2009: 2).

Forensic science also refers to the methods and techniques of science applied to a matter involving the public. When any science is applied to a matter involving the public, it is, in that instance, a forensic science. Today forensic science has come to mean the application of the methods and techniques of science to matters involving justice and the courts. Forensic science is a big tent since almost any science can have forensic applications (Siegel, 2009: 2).

2.2.1 Forensic investigation

The term forensic investigation refers to the use of science or technology in the investigation and establishment of facts or evidence to be used in criminal justice or other proceedings. However, forensic investigation is a rather broad field with many different subdivisions. There are at present few formal standards designed for international practice in forensic science including the core disciplines of forensic pathology, anthropology, and others. There are no credentials or qualifying procedures for forensic pathologists practising internationally. In America the pathologists have gone a notch higher in setting up standards for different types of postmortems. One of the major standards alongside the Minnesota Protocol is the Interpol Disaster Victim Identification Form Set. These established documents are to be followed by any developmental operational practice in international domain. The last one in particular, has been understood by police forces around the world for it has been used countless times and has an established structure which keeps it under review (Hutchins, 1994:20).

Forensic science shelters many areas of science and consolidates them together to create an area of science called forensics. Forensic science uses chemistry (pH and other chemical tests, spectroscopic analysis, chromatography,), biology (fingerprinting, entomology, DNA testing, behaviour, hairs), and physical science (ballistics, blood spatter analysis, structural analysis). Forensic science is an umbrella term that has numerous areas under it. At a crime scene there are many experts who cover different fields as per their specialties. In broad yterm all these people are referred to be forensic scientists (Cardinetti and Cammarota, 2005: 82).

2.2.2 General forensic procedures

There are basically three main steps in forensic investigation namely; the acquisition of the evidence, the authentication evidence, and analysis of the collected evidence. These three steps are important to any forensic investigator although some individuals may add their own steps in relation to immediate scene of crime (Kruse and Heiser, 2001:3).

According to Kent, the forensic process is composed of the following phases:

Collection: The entry point is to identify, label, record, and acquire data from the possible sources of relevant data, this should be done while following guidelines that preserve the integrity of the data. The collection of samples is typically performed in a timely manner due to the likelihood of losing dynamic data.

Examination: This phase involve processing large amounts of collected data. It requires a combination of automated and manual methods to assess and extract data of particular interest, while at the same time preserving the integrity of the data.

Analysis: The results of the examination need to be analysed by using legally justifiable methods and techniques, to develop useful information that addresses the questions that were the impetus for performing the collection and examination.

Reporting: The last phase is reporting the results of the analysis. This phase include describing the actions which were used, by also explaining how tools and procedures were selected, defining what other actions need to be performed, and providing recommendations for improvement to guidelines, policies, tools, procedures, and other aspects of the forensic process. The procedure of the reporting step varies greatly depending on the nature of finding and the crime committed (Kent *at al.*, 2006:16).

2.2.3 Crime scene

According to Van Heerden (1986:217) scene of crime is “a field laboratory” where objects of dispute can be located for laboratory tests at a later stage whereas Marais and Van Rooyen (1990:23) define a crime scene as the locality of hidden clues which can lead to the clarification or detection of the crime, and it includes any other locality or place where physical clues concerning the crime can be found. Crime scenes can be classified into two types, namely, primary and the secondary crime scenes (Gardner, 2005:67-68). This classification is based on the original location where the crime occurred (Lee et al., 2001:2). Primary crime scene is a place or area where an incident occurred and where most of the physical evidence proving the majority of the elements of the crime under investigation, would be found while the secondary crime scenes are places/things where physical evidence relating to the incident may be likely to be found.

2.2.4 Crime scene investigation

Crime scene investigation is the most crucial step in any criminal investigation (Lee *et al.*, 2001:1). A crime scene is a place where the investigator seeks to discover all the aspects of the criminal activities, while crime scene investigation is a process to locate and gather physical evidence from that scene. The authors continue to state that crime scene investigation is more than the processing or documentation of crime scenes; it provides the investigator with a starting point to investigate the alleged crime (Lee *et al.*, 2001:4). Gardner (2005:1) points out that crime scene investigation is an inherent task and duty of most criminal investigators.

2.2.4.1 Objective of crime scene investigation

The objective of crime scene investigation is to recover physical evidence, and to ensure that the location of evidence can be accounted for all the way from the crime scene to the court, in order to secure a conviction (Pepper, 2005:13). According to Lee *et al.* (2001:113) and Ramsland (2001:XII) the objective of a crime scene investigation is to locate potentially relevant and meaningful evidence that could be used to link or clear a suspect or witness to a crime, and to find information and evidence that proves a motive and to identify the crime. Ogle (2004:2) takes the view further and argues that the basic objective of crime scene investigation is to reconstruct the event of the crime, in order to provide answers to what happened and who is responsible.

2.2.4.2 Crime scene investigation process

The crime scene investigation process is an organised, methodical, systematic and logical process (Lee *et al.*, 2001:49). Any actions implemented at the scene of the crime must be correct,

objective, systematic and thorough, in order to achieve its full potential as a source of information (Van der Westhuizen, 1996:20). There are certain sequences of procedures that need to be followed throughout the crime scene investigation process (Gardner, 2005:75). Actions at the crime scene will be determined by the specific facts of the crime - facts such as when and where the crime was committed, who the suspect involved is, and if the victim is able to communicate well (Ogle, 2004:209). The crime scene investigation process is characterised by three essential conditions for success: organisation, thoroughness and caution (Fisher, 2000:53). However, when applying any processing model to a crime scene, the crime scene investigator should be prepared to go back at any given moment to a previous step and to repeat steps as deemed necessary. This going back and forth process is an integral part of crime scene processing. It happens all the time and at nearly every step of crime scene processing (Gardner, 2005:79).

Van der Westhuizen (1996:20) consolidated all stages in the crime scene investigation process into the following three phases: the pre-investigative phase, the investigative phase and the post-investigative phase. The pre investigative phase commences as soon as the first member arrives at the scene of the crime and includes the control, protection, assessment and walk through phases, as described by Lee et al. (2001:17), Gardner (2005:1) and Horsewell (2004:8).

The term “first member” refers to the first representative of the police responding to the complaint, and is usually the nearest available police member, who is dispatched to the crime scene. The success of the investigation depends greatly on the actions and steps taken by the first officer to arrive at the crime scene (Fisher, 2004:28). The first police official who arrives at the crime scene should remain in control until the investigator or crime scene team arrives

(Ramsland, 2001:2). Only persons involved in the investigation should be given access to the crime scene, to avoid the disturbance of possible physical evidence (De Ladurantey & Sullivan, 1980:42). Taking control of the crime scene has two purposes, to prevent any disturbances at the crime scene and helping to identify physical evidence and any possible witnesses (Marais and Van Rooyen, 1990:28; Van der Westhuizen, 1993:18).

Once the scene is secure, the crime scene technician, together with the investigator investigating the case, should conduct a walk through to assess the scene of crime (Lee *et al.*, 2001:57). The crime scene expert when arriving at the scene, should first obtain basic facts from the first member already present (Fisher, 2000:51). Before any action can be taken at the crime scene, the investigator must assess the circumstances in order to decide on a plan of action and should note that assessment is an ongoing process and the investigator should adjust the processing plan when necessary (Gardner, 2005:76).

Quick and preliminary walk through of the crime scene is vital for it helps to determine the nature and extent of the crime scene, and to identify possible physical evidence. However, when entering the crime scene, the investigator should proceed cautiously, mindful of potential physical evidence at the scene (Fisher, 2000:51). All visible evidence should be traced and marked by means of placing a label or marker next to the evidence. Once the walk through is completed, a briefing should be held at the scene, to inform all relevant role-players of conditions at the scene and of special equipment needed for processing the scene (Hazelwood & Burgess, 2001:29).

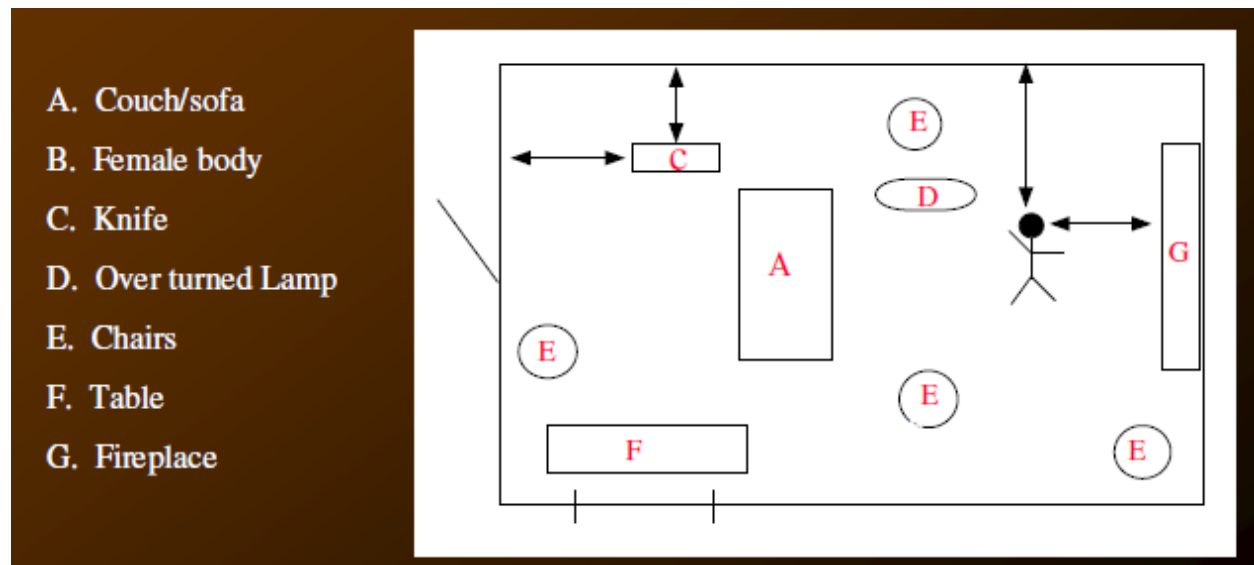
The investigative phase starts with the documentation and searching of the crime scene. Documentation of the crime scene is crucial and many cases have eventually been solved, not by a lengthily scientific analysis, but rather by the properly documented, seemingly insignificant

detail located or observed at the crime scene (Lee *et al.*, 2001:25). According to Gardner (2005:129) crime scene documentation consists of the following key elements:

- **Notes and reports-** note-taking is the first form of crime scene documentation and is the most important duty and responsibility of the first member and the investigating officer at the scene (Fisher, 2004:77). Gardner (2005:203) and Joubert (2001:338) state that the first member and the investigator should, upon arrival, note everything that they observe at the scene, and record all relevant information. Note taking and the compiling of crime scene reports can be used, firstly, for reconstruction of the events found at the crime scene and, secondly, to refresh the witness's memory before a court case (Joubert, 2001:339).

- **Photographs/videos-** Photographs are one of the best ways to quickly and accurately document evidence (Savino and Turvey, 2005:77). Photos and sketch plans form an important part of crime scene investigation in general, since they provide a permanent graphic record of the appearance and position of victims, objects and physical evidence and their relationship to each other at the crime scene (Lee *et al.*, 2001:66). Close-up photos should be used frequently throughout crime scene investigation to record smaller size evidence (Horsewell, 2004:146).

- **Sketches-** Crime scene sketches are another form of crime scene documentation and complement each other with photographs and, therefore, sketching the crime scene should be routinely done (Fisher, 2004:86). The purpose of crime scene sketches, according to Marais and Van Rooyen (1990:41), is to support the crime scene notes and photos and to explain the crime scene and the location of important evidence. The sketch supports the photographs and notes and will ultimately complement the final report and provide a greater understanding of the crime scene (Gardner, 2005:163). Below is an example of a crime scene sketch.



All the above elements support each other and provide everyone with a clearer picture. The objective of the investigator should be to document the scene in all possible ways, since documenting the scene in all the above ways requires the investigator to think and observe differently and, as a result, a more complete picture of the crime scene is documented (Hazelwood & Burgess, 2001:290; Gardner,2005:129).

According to Lee et al. (2001:122) and Gardner (2005:1) there are basically six different search patterns, namely:

Wheel method – The investigators start at the middle of the crime scene and then move to the outside (Lee et al., 2001:127). This method lends itself more towards outdoor crime scenes; however, it is seldom used in practice (Van Rooyen & Marais, 1990:54).

Spiral method - The investigators start from the outside and work their way through to the centre point, or vice versa (Gardner, 2005:106).

Zone method – According to this method the scene is divided into various sectors or zones and each investigator is responsible for his/her own sector. This search method is effective indoors and can be used to search a room (Gardner, 2005:110; Marais and Van Rooyen, 1990:56; Lee et al., 2001:126).

Strip method –The crime scene is divided into a number of narrow strips or lanes and each strip is searched by an investigator. This method is thorough, although simple, and can be carried out by one or more investigators satisfactorily. The method can be applied both outdoors and indoors (Van Rooyen & Marais, 1990:56).

Grid method –In this method, the crime scene is divided into horizontal and vertical strips. This is a very thorough search method, and involves one or more investigators.

Link method –This is based on the four-way linkage theory, this theory seeks to find associations between the scene, the victim, the physical evidence and suspect. During this search method the investigator searches for physical evidence and clues that link or relate to a particular crime or action (Lee et al., 2001:124).

The purpose of the collection process is to collect physical evidence for analysis at the crime laboratory to produce scientific information with evidential value (Gardner, 2005:347). The process of collection will usually start with the most fragile or most easily lost evidence. Collection of the fragile evidence first, will avoid possible contamination and damage of the scene (Horsewell, 2004:27). The collection of evidence is a disturbing process, since some items of evidence or other structures may need to be moved or relocated before the rest of the crime scene can be processed (Lee *et al.*, 2001:132). Once an item is removed from the crime scene, the context of the crime scene is changed forever (Gardner, 2005:77). Therefore, so that further

evidence is not damaged or lost one person should be designated to collect the physical evidence (Lee *et al.*, 2001:132).

During the post-investigative phase the crime scene investigator and support services should ensure that all equipment used during the crime scene investigation is removed from the crime scene, before they move on to the next step - which is to release the crime scene. After a thorough review of the collected evidence and all prepared documents, release of the scene should be considered (Hazelwood & Burgess, 2001:295). The person in charge of the investigation should release the scene only if it is safe to do so, and should document the date and time of the release and the person to whom the scene was released to.

The analyzing and interpretation phase is the final step of the crime scene investigation process and can be defined as the use of scientific methods, physical evidence, its interrelationship with the scene and other items of evidence (Gardner, 2005:349). However, the maintaining of continuity of physical evidence after it is removed from the crime scene is essential for the results of the investigation. The physical evidence must be handled in such a way that it reaches the forensic science laboratory undamaged and uncontaminated. The forensic scientist examines all related physical evidence found at the crime scene during this phase, to obtain context from the physical evidence that is separate and specific (Gardner, 2005:347).

2.2.5 Role of anthropology in forensic investigation

The main focus of physical anthropology as a discipline is the biology of human beings in its cultural context. Forensic anthropology which is a subfield of physical anthropology adapts this focus to the study of humans, their ancestors and their biology. It has the task of identifying

people who cannot be identified through photographs, fingerprints, or other similar means. Ideally, forensic anthropologists analyse skeletal remains and helps to determine whether they are of human and, if they are human, the ancestry, age, stature, sex, height and other characteristics of the deceased from unique features of a decent from the skeleton. Forensic anthropologists are key to the rebuilding and identification of victims in mass fatalities, such as airplane crashes and bombings. When they work closely with pathologists, dentists and others, they aid in the identification of victims who might not be found (Houck, 2007:10).

Forensic anthropology applies anthropological techniques to modern human remains for law enforcement. The forensic anthropologist assists the pathologist and investigator in the determination of the cause of death. Due to their specialized training in both biological anthropology and archaeology, most forensic anthropologists assist in the location and recovery of buried or surface remains which are skeletonized (Snow, 1982:98).

Forensic anthropologists are firmly rooted in twentieth century academic research of physical anthropology, mostly bio-archaeology. Physical anthropologists have knowledge, skills and experience which enable them to derive biological and cultural information from human skeleton in archaeological context and has proven its direct applicability to medical legal context (Klepinger, 2006). Reading the bones for clues to personal identification summed up most of the initial work by anthropologists, who were called upon to help interpret skeletal evidence. The cause of death can be diverse as gunshot wound, melanoma, or toxic shock. While determination of the cause of death is ultimately the call of pathologists, medical examiners and coroners, when remains are skeletal, the opinion of the forensic anthropologist counts. What is also of concern to anthropologists is maintenance of chain of evidence or chain of custody. Anthropologists vouch

for the security of any remains or other evidence left their custody. They guarantee that the evidence is not tampered with in any undocumented way (Klepinger, 2006).

Physical anthropologists in most countries are housed in departments of anthropology. This implies that undergraduate training in the four fields of anthropology automatically introduces the student to a broad range of cultural practices and to the principles of archaeology. In the USA, for one to be admitted into the physical anthropology section of the American Academy of Forensic Sciences, requires a masters degree in anthropology and, more specifically, in human osteology/skeletal biology. For a successful practitioner one should have basic of biology, physics, chemistry and mathematics under their belts for the course teaches students critical thinking and scientific attitude, and promotes efficient interagency and interdisciplinary cooperation (Galloway and Simmons, 1997). From this it is clear that anthropology has a lot to offer in the field of crime solving and basically at the crime scenes. Anthropologists are exposed to many bodies of knowledge for anthropology is holistic discipline that studies humans in both space and time. This approach enables one to understand different cultures and their social and cultural traits that can be linked to issues of crime in particular when it comes to physical evidence on remains they are equipped with knowledge from physical anthropology to determine if the remains are of human origin or of what animal.

Since 1970s there has been application of forensic investigation in the world into the cases of political violence and human rights violation. It originated from the linkage of phenomena of violence. Due to the disappearance and murder of thousands of people for political, ethnic and religious reasons became a key element in this process and there was the need of conducting investigations. This led to search and exhumation of the remains of victim who were usually

buried in clandestine graves. This was an impetus to transition to democracy for there was identification and the establishment of the cause of death y (Fondebrider, 2010).

Many countries today use forensic anthropology to investigate cases of political violence; there are two applications which have significantly influenced the discipline. In 1984 in Latin America there was a start of investigation of the human rights violations committed in the region by military dictators (except for Colombia and Peru). These investigations contributed to broadening of the application of Forensic Anthropology beyond classical definition, particularly as known in English-speaking countries. The other application, arose several years later and is better documented, it involved the extensive investigations in 1996 in the former Yugoslavia. From that time, there has been exhumation of remains from mass graves scattered mostly across Bosnia in which it was spearheaded by International Criminal Tribunal for former Yugoslavia (ICTY) and being assisted by Physicians for Human Rights (PHR). Later, the International Commission on Missing Persons (ICMP) did a follow up through on these tasks by identification of victims. Most of the forensic anthropologists currently working in this this discipline whether might have been involved, at any given time, in the experiences above, and has helped in gaining a valuable and different expertise. For some, these experiences were the trigger for a lifetime of commitment to this field, while to others it helped them in their return to more traditional fields of application (Fondebrider, 2010).

2.2.6 Conduct and ethics

Irrespective of local laws, rules and regulations, professional conduct outline the ethical obligations of the personnel working at crime scenes. These codes stress the importance of acting with care, objectivity and professionalism (“treat evidence for what it shows not what you think it shows”), impartiality and open-mindedness (“you may not be independent from the police but you are impartial”). Whenever there is a conflict between preservation of evidence and saving a human life, priority is always given to emergency medical care (UNODC, 2006:4).

Whenever there are pressures to deviate from the technical standards and ethical issues the best practice guideline facilitates the observance of agreed. These guidelines serve as objective standards against which individual national standards may be compared. They need to be circulated and promoted by all forensic community and should include reference to the use, wherever possible (UNODC, 2006:7).

Other key issue in forensic scientist is the aspect of neutrality and independence. There is a need for everyone to recognize their roles and responsibilities as forensic scientist and the importance of adherence to relevant guidelines. Forensic scientist needs to conduct him/herself in ways that do not infringe this impartiality. Families have rights to information and all arrangements need to recognize that for the integrity of the investigation and the wishes of families, involvement by families in the processes leading to identification will generally be beneficial. The accepted principles of protection of personal information, including genetic information needs to be recognized by forensic scientists. Apart from the possibility of physical danger, forensic scientists can wittingly, unwittingly or by virtue of poor practice, participate in violations of human rights and (Cordiner and Mckelvin, 2002:879).

2.3 Theoretical framework

2.3.1 Actor-Network Theory(ANT)

ANT is a framework which has been used in social studies of technology to explain the way technological artifacts are created in society. ANT is frequently associated with three writers: John Law, Bruno Latour and Michel Callon. They were the first writers to use the term “Actor-network theory” in describing their particular approach to technical and scientific innovation and, over the past thirty years, they together with other writers have written a number of articles and books that attempt to summarize, clarify and critique ANT (Akrich & Latour, 1992; Callon, 1999; Callon & Law, 1997; Hassard et al., 1999; Latour, 1987; Latour, 1996; Latour, 1999; Latour, 2005; Law, 1992, 2007; Lee & Brown, 1994; Neyland, 2006).

The term "Actor network theory" was developed by Michael Callon in 1982 and describes the world as a network of a hybrid of actants. In this framework, the actants who are both human and non-human entities are identified, and networks which they are embedded are explored, in order to identify ways in which the social context is bound up with the different actants (Latour & Woolgar, 1986). The theory is basic components are: Heterogeneous networks, network consolidation and network ordering.

| Concepts of ANT | Definitions |
|-----------------|---|
| Actor | According to Law (1992:5) an actor is a patterned network of heterogeneous relations, or an effect produced by such a network. Actor can be used to refer to a machine , a meteorological system, a person, a plant, or a microbe, (Whittle & Spicer, 2008). The actor aspect of actor-network is not the source of an action, but rather the target of a vast array of entities which are aiming in its direction (Latour, 2005). |
| Actor networks | Law (1992) believed that an actor is also a network. An actor network is perceived through common inclusion of human and non-human participants in a network through translation and negotiation processes (Hassard, et al., 1999). The notion of actor networks strongly suggests that what seems to an observer to be an actor could, in fact, be an entire network (Czarniawska, 2006). |
| Symmetry | According to Latour (1994a) he defined symmetry based upon that which is preserved during transformations. He continued to say that symmetry is a unified model of the social and natural worlds in which no entity (human or non-human) has priority or exists outside the network (Latour, 1996b). |
| Translation | Translation means a relationship that doesn't intimate causality, but rather encourages two mediators in coexistence (Latour, 2005). It also “refers to all the displacements among other actors whose mediation is essential to the occurrence of any action. Instead of a rigid opposition between context and content, the translation chains refer to the work by which the actors change, displace and translate their several and contradictory interests” (Latour, 2001:356). Law explains translation as something which implies transformation and the possibility of similarity; the possibility that something can represent something else. (Law, 1992) |

Source: Czarniawska, B. (2006)

In ANT it is possible to study both technologies people using the same tools. ANT when applied to cases in which the social and technological are embedded in each other is most productive for it enables both to be studied on equal footing (Elbanna, 2009).

According to Moser et al., (2001), He indicates that this theory evolved from the interdisciplinary field of science and technology studies. These fields study science and technology as influenced by social and cultural factors. They postulate that science and technology are neither linear nor cumulative process independent of social forces with

unidirectional influence on society. According to him technology, science, and society studies, science is not an objective enterprise disconnected from the social world, determining and dominating ways of thinking and social relations (Moser *et al.*, 2001:10).

(STS) scholars conclude that scientific knowledge is not untouchable but it wins its credibility through socially embedded and cultural norms and practices. Scientific knowledge is socially constructed and this is common for different approaches in STS. STS borrow and extend historical, anthropological approaches, philosophical and sociological. Central concepts are “the links between science and other sources of authority and knowledge, such as political institutions, historical and cultural traditions”, and “common sense” understanding, where generated truth is seen as malleable partly conditioned by locally and specific factors (Edwards, 2001, cited in Schneider, 2001:338).

In the 1980s, the same methods used to study natural science were also to be used to study social science reflexivity became a central aspect in the STS field. “The attempts to show that natural science and technology were social constructs should also be applicable for studies within STS, leading to a reflection over their own production of knowledge accumulation”. Much of this was influenced from the general reflexive and linguistic influence that emerged in the fields of social science and humanistic theory (Moser *et al.*, 2001:24).

Bruno Latour had a major influence on ANT. He used literary moves of making the objects more alive, and distanced himself from reflexivity by focusing and reflecting over production of knowledge and the subject. Such a focus is livelier than hundreds of boring self-reflecting trains of thought (Latour, 1988, cited in Moser *et al.*, 2001:27). He focused on describing the world as

alive and material. In other words, he emphasized on a more realistic presentation of the world and its objects. The weight was on how the material is of significant (Moser *et al.*, 2001:27).

2.3.2 Relevance of the theory to the study

Actor Network Theory examines the links of nonhuman and human entities based upon an anti-foundationalism approach where by nothing exists prior to its performance. Human intention and action are therefore decentred in this approach. The main objective is “to understand how these things come together and manage to hold together to assemble collectives or ‘networks’ that produce force and other effects”. ANT thus helps us to ask: “What are the different kinds of connections and associations created among things? What different kinds and qualities of networks are produced through these connections? What different ends are served through these networks? A key assumption is that humans are not treated any differently from nonhumans in ANT analyses”. This assumption, elaborated by Bruno Latour (1987), is called ‘symmetry’. “Everyday objects and parts of objects are assumed to be capable of exerting force and joining together, changing and being changed by each other”. The networks formed can keep expanding to extend across broad spaces, long distances or time periods but networks can also break down, or dissolve, or become abandoned. ANT analyses show how things are attracted into or excluded from these networks, how some linkages work and others do not, and how connections are bolstered to make themselves stable and durable by linking other networks and things. In particular, “ANT analyses focus on the minute negotiations that go on at the points of connection. Things persuade, coerce, seduce, resist, and compromise each other as they come together. They may connect with other things in ways that gather them into a particular collective, or they may pretend to connect, partially connect, or feel disconnected and excluded

even when they are connected”. ANT treats both people and artefacts as symmetrical and it exposes relationships which are more difficult to detect using other approaches and this makes it the major advantage of using ANT in relation to other alternative approaches (Doolin & Lowe, 2002; Tatnall & Gilding, 1999).

The theory was relevant to the study for forensic investigation for it involves different actors both humans and non-humans but with a common goal to find out what happened on the basis of the evidence left by the criminal. Interrelated social factors lie behind and shape the growth and stabilization of an artefact as socially constructed by Trevor Pinch, Weebe Bijker. In the second approach, it sees technology and society as a “seamless web” (Moser *et al.*, 2001:28).”The metaphor of a “seamless web” was first introduced by the techno-historian Thomas Hughes in the second approach, where he used systems metaphors to integrate social, economic and political aspects and to erase the micro- and macro-level distinction”. Both assume that social artefacts or technology can be understood if they are interrelated within a wide range of non-technological and specifically social factors (Moser *et al.*, 2001:29).

In the third approach, “however, in an attempt to avoid social determinism, by understanding that the social only lies behind and directs everything, actor-network theory , goes one step further in the use of the “seamless web” metaphor. It breaks down the distinction between human and non-human actors. Put formally,” “The stability and form of artefacts should be seen as a function of the interaction of heterogeneous elements as these are shaped and assimilated into a network” (Law, 1987:113). This implies that, “technology, humans, scientific papers, elements of nature, architectures, time recourses organizational variables, or the socio-material, may all be elements in a heterogeneous actor-network, and contribute as actors” (Law, 1992:2).

CHAPTER THREE

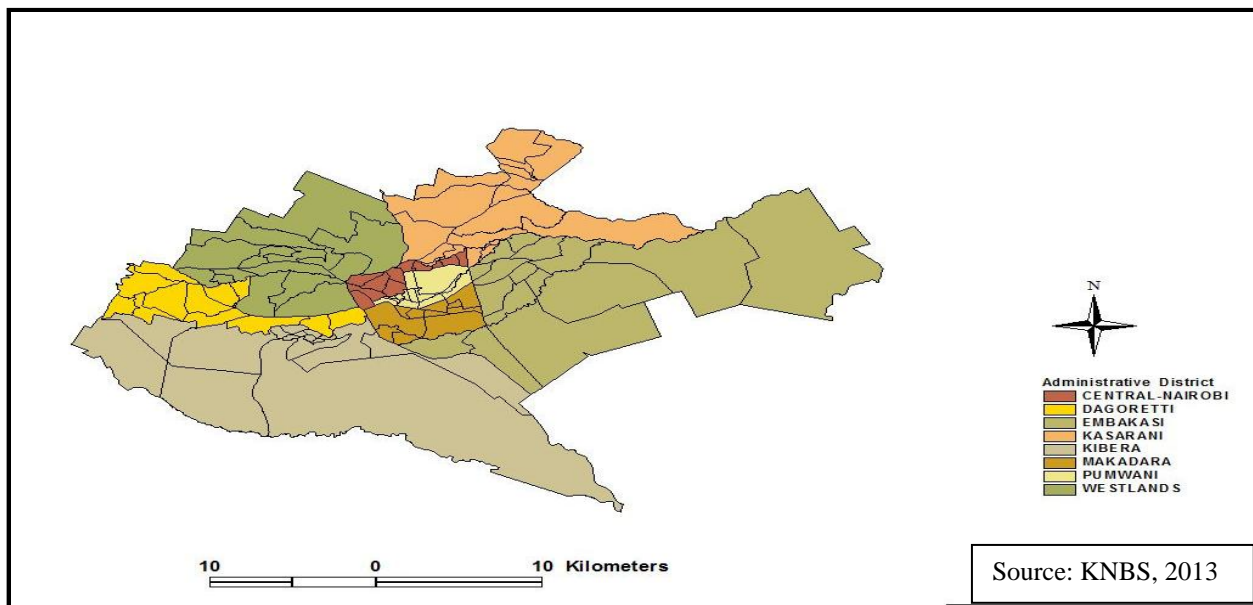
METHODOLOGY

3.1 Introduction

This chapter describes the procedure that was followed in conducting this study. It provides information on the research site, the study design, study population and unit of analysis, sample size and sampling techniques, as well as methods of data collection, and how the data were processed and analysed. The chapter also describes the ethical considerations observed during the study.

3.2 Research site

This study was done in Nairobi City County which has eight administrative sub-counties (map 3.1). Nairobi City is one of the 47 counties in Kenya. The County borders “Kiambu County to the North West, North and North East, Machakos County to the East and South East, and Kajiado County to the South, South West and West”.



Map 3.1: Map of Nairobi City County showing administrative Sub Counties

3.3 Research design

According to Mouton “Research design is the plan in which one obtains research participants and collects information from them to investigate the research problem”. The researcher used an exploratory and descriptive research design, since it involves the researcher going into the field and focusing on the personal experience of the participants in this study” (Mouton, 2001:149). The researcher only targeted forensic investigators with scenes of crime experience. The researcher used the qualitative approach, as described by Silverman (2000:1). By using the qualitative approach, an attempt was made to understand the evidential value of crime scene investigation. This study was conducted in two phases, both complimenting each other to ensure high quality of data collection. The first phase used semi-structured interviews to collect both qualitative and quantitative data from forensic experts. The second phase involved key informant interviews with administrators. The bio data was entered in a separate sheet and the qualitative data was analysed thematically and presented as verbative quotation.

3.4 Study population and unit of analysis

Study population refers to the sum total of all the units of analysis (Bailey, 1987:81). The target population for this research consisted of practitioners in scenes of crime under forensics in the National Police Service. The unit of analysis was the individual scenes of crime investigator.

3.5 Sample size and sampling procedure

The study population is usually so large, that from a practical point of view it is simply not possible to conduct research on all, and therefore the researcher has to obtain data from only a sample of the population (Welman and Kruger, 2001:47). Critical case sampling was used to

select units of analysis. Snowball sampling was used to select 12 practitioners for the study. The researcher used the chain of command to have the 12 respondents. He started at the Criminal Investigation Department headquarters in where he was sent to the department of scenes of crime. From the department the officer in charge of the station introduced the first investigator in which the investigator introduced the researcher to the second and the trend continued by introduction of previous investigator up to the twelfth investigator. By doing that, the researcher gave each detective the same chance of being included in the sample, as described by Welman and Kruger (2001:53).

3.6 Data collection methods

3.6.1 Semi-structured interviews

According to Boyce and Neale (2006) “semi-structured interviewing is both a quantitative and qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, programme, or situation”. A semi-structured questionnaire (Appendix II) was used to collect the data. This method helps to provide detailed information on an individual’s own and lived experiences thereby assisting to achieve a holistic understanding of the research problem (Boyce and Neale, 2006). The method of data collection targeted information on forensic procedures, the level of expertise and training of the forensic experts and the ethical dilemmas and their solutions in practical daily operations.

3.6.2 Key informant interviews

Key informants are people believed to be knowledgeable on the topic under investigation (Nkwi *et al.*, 2001). Key informant interviews are a commonly used data collection technique for rapid

assessments. Typically a key informant is a local leader whether civil, government or religious (UN OCHA/NRC, 2008). The key informants in this study were purposively chosen on the basis of their positions and knowledge in their respective areas. They were used to obtain insights into the roles of the main actors in planning and running of the institutions. A key informant interview guide was used to collect data (Appendix III). This method of data collection targeted the operations, limitations and challenges facing forensics in Kenya.

3.6.3 Secondary data sources

A thorough literature study was conducted in order to understand all the issues surrounding the topic (Clarke, 1999:67). International and national sources in the field of criminology, policing, and law, such as articles, books, training materials theses, and Internet information relating to the topic were sourced, to obtain relevant information on what has been published on the topic. The researcher could not find literature on the exact topic of research and searched literature sources with similar topics. The Public service commission code of conduct and national police service act No 11A of 2011 were highly used to cross check on the police code of conduct and general powers of a police officer. The researcher searched the above mentioned sources for information that would cover and provide answers to the research questions.

3.7 Data processing and analysis

Qualitative data from key informant interviews and in-depth interviews were analysed thematically. For each of the data sets, a separate code sheet was created in an attempt to establish and interpret the patterns and relationships of the observations.

3.8 Ethical considerations

When human beings are the focus of research, one needs to closely look at the ethical implications of what one is proposing to study (Leedy and Ormrod, 2005:101). To obtain informed consent from the respondents, the researcher explained the purpose, duration and potential use of the research results from the field beyond academic purposes. In addition, any other research related information as might be of interest to the respondents was duly clarified before any data were collected. Respondents were also informed of their right to disqualify themselves or withdraw at any stage of the study. During the in-depth interviews, the participants' consent was sought and they were also informed that no piece of information gathered in the course of the study will be used to jeopardize their welfare. Finally, the study subjects were assured of their anonymity during publication of the research findings through the use of pseudonyms, and they were also made aware of the means to access the final research outcome.

3.9 Problems encountered in the field and their solutions

There was the challenge of getting to interview the experts for they were very busy with their duty due to the inadequacy of personnel in the section but the researcher overcame this by spending a longer period than earlier planned. The researcher extended the number of days allocated to data collection. The researcher also accompanied the experts to the field which built more confidence and rapport with them.

CHAPTER FOUR

MANAGEMENT OF CRIME SCENE

4.1 Introduction

This chapter presents findings on the management of the crime scene. It starts by presenting the demographic profile of the respondents, then the tools and technology available for the experts to use while on duty and closes with a discussion of the structures available to the investigators.

4.2 Demographic profile of the respondents

4.2.1 Gender

The majority of criminal investigators were men with a tally of 10 men compared to 2 women. This finding suggests bias in the involvement of the two genders in issues of crime and also reflects gender exclusiveness in forensics and investigations in the Kenya Police Service.

4.2.2 Age

The study findings show that 4 respondents were aged 18-28 years, 4 were aged 29-39 years while those aged between 40 and 50 years and 51 and above were 2 in each category. It was important to establish the age of the expert for the aspect of experience and its effects on the findings revealed that most of the experts are below the age of 40 years.

4.2.3 Education background

The study sought to know the highest level of formal education by the crime investigation experts. Based on the findings, 2 respondents had a university degree, 3 were still in university pursuing a degree while one of the respondents was pursuing post-graduate studies. There was

also one of the experts pursuing a diploma course while 4 had completed secondary education and one went through another system of education different from the Kenyan 8-4-4 system. This variable was considered vital in identifying the knowledge the experts have in relation to crime investigation. Regarding the relevance of training to the area of specialization, only one of the experts reported to have a training background in forensics.

4.2.4 Rank of the respondents

The study found that the majority of experts are below the inspector's rank with a frequency of 9 while 6 respondents were constables and 3 were above the rank of inspector. This was an important variable for it helps in relating rank and years of service in the police service for there are scenes which cannot be processed by officers who are below the rank of inspector.

4.3 Training and experience

4.3.1 Minimum qualification

The respondents were asked to cite the minimum qualification for a forensic investigator. There were mixed responses in which some of the respondents indicated that there were no minimum qualifications as illustrated in (Box 4.1).

Box 4.1: Testimonies on minimum qualifications for investigators

Case 1: There is no minimum qualification since any police officer can be an investigator, hence the concept of academia is not highly ranked...They pick the one with higher qualifications at the time of application hence no specific grades. (Forensic investigator 1)

Case 2: There are no identified minimum qualifications but currently they are taking graduates with bachelors of Science and who are interested. (Forensic investigator 5)

Case 3: Kenya Certificate of Secondary Education (KCSE) Mean grade of C plain, C plus in the sciences and C plain in the languages. (Forensic investigator 6)

Case 4: A person with division 3 and has served in police for 4 years and has finished police exams, at least 2. (Forensic investigator 10)

Case 5: Have served for the general duty for 4 to 5 years, KCSE qualification with a mean grade of C plain and strong in science background. (Forensic investigator 2)

The above findings suggest that there are no set minimum qualifications for one to be recruited as a scene of crime investigator. The key informants indicated that for one to be a crime scene investigator one must be a police officer, but it also depends on the time one was recruited and the requirements at that time.

There are no specific grades for one to be a crime scene investigator. At first you must be serving as a police officer and it at that time one can be considered to join the department. Different years have got a different point of consideration according to the need in the field. (Key Informant 2)

There are some who are recruited due to their strength in sciences whereas others due to hard work and interest in the department. Experts are recruited according to the departments they are to join for there are many departments hence no specific standards. However, we are forced to source from the pool that we have and also the ones who have expressed interest to work in the department. They are mostly selected from general duty police or the General Service Unit. (Key Informant 1)

4.3.2 Selection criteria

The respondents were required to narrate how they were selected to join the department in order to find out if there are any selection criteria used in recruiting the experts. No clear procedure was mentioned though it was clear that all had to be recruited as police officers first. Some of the respondents indicated that the selection criterion was biased in that in some cases it was based on the closeness to the administration, meaning it depended on who you know and not what you know. Most respondents, however, indicated that they were first posted as general duty officers and later got a signal of the available position in scenes of crime. It also came out clearly that the recent officers were selected during training at Kiganjo Police Training College.

Box 4.2: Testimonies on the selection criteria

Case 1: You are recruited either from the police or the General Service Unit (GSU) and posted to CID. You first go to service and wait for further communication. From the CID you are sent to different stations. (Forensic investigator 1)

Case 2: There are no criteria to be followed and the senior officers are the ones who pick those they want to join the section. A signal is sent and you are asked to apply for the position, later you are called for the interview with others at CID Headquarters and the ones who pass the interview start the initial training. (Forensic investigator 2)

Case 3: Nowadays it is better but earlier it was on the basis of who knows who and seniors used to appoint their allies and friends. (Forensic investigator 3)

Case 4: The signal was specific on the sections we were to apply to. I submitted my name and was later called for an oral interview and then my personal documents were checked; one needs to have worked with the crime investigation section at the station level and then transferred to CID. Then you are selected and the panel assigns you the section to go where they feel you will deliver well. (Forensic investigator 4)

Case 5: We were selected after doing interview before the pass-out in Kiganjo and were instructed to go to CID for more training but we didn't know which section we were being posted to. (Forensic investigator 5)

Case 6: Currently the selection is done at the Kiganjo or GSU training school in the last weeks before graduation. (Forensic investigator 6)

4.3.3 Basic training

The respondents were required to give the basic training for one to be referred to as an expert at the scenes of crime. All respondents stated that one has to be trained in the basic investigation course at CID training school. The basic training course comprises: Criminal procedure, the Penal Code, Evidence Act, CID structures, photography, basics in fingerprints, handling of exhibits and general scenes of crime, then later you need to do a placement test in which you have selected in the list of your choices. According to Forensic investigator 1, when one is recruited from the police to the crime scenes investigation unit, that person must be taken to the CID training school to learn some basic skills.

4.3.4 In-service training

The respondents were asked to indicate if they undergo in-service training and the number of times they have attended. From the findings, not all the respondents have attended in-service courses, but most of them indicated that they had done so. Those who had not attended any in-service course gave various reasons. One of the respondents, for instance, reported having not done the initial training course and so could not attend the in-service courses. The in-service courses are in most cases sponsored by development partners as indicated in Box 4.3 below.

Box 4.3: Testimonies on in-service training

Case 1: There is always in-service training which is done when sponsors from foreign countries come. One is expected to attend at least one or two. (Forensic investigator 7)

Case 2: Denmark is currently doing training and others go to the United States of America, the United Kingdom, Botswana, Egypt or South Africa. (Forensic investigator 5)

Case 3: I have not attended any in-service training for I have not done the initial course for basic forensic investigation. I am waiting to join the training when donor funds come and it is also limited to the number of people needed to attend and the time in which they are required to attend. (Forensic investigator 8)

The in-service trainings are not a must but the Officer in Charge at CID is the one who picks the individuals who need to undergo the short courses. Those who attend such courses are awarded certificates of participation and they are trained by foreign experts through their embassy. Some respondents, however, reported non-attendance of any in-service training. From the findings four officers had not attended any in-service training, four had attended only one training, and three had attended three trainings while only one had attended four in-service trainings.

4.4 Tools and technology

According to the study findings, the tools and technology used by the forensic scientist depend on the type of evidence to be collected and the kind of laboratory where such evidence is analysed. Although many scientific and allied services apply to forensic sciences, there are common disciplines provided by State forensic laboratories.

In response to the question on the most common cases encountered in the line of duty and the facilities available to handle them, the following were listed as common and rare cases as summarized in Table 4.1 below.

Table 4.1: Common and rare cases

| Common cases | Rare cases |
|---|--|
| <ul style="list-style-type: none">• Burglary and break-ins• Murder/sudden death/ suicide/ shooting• Robbery with violence | <ul style="list-style-type: none">• Terror attacks• Fire investigation• Threatening parcels• Animal attacks• Bomb explosions• Air crashes |

4.4.1 Facilities available for investigators

All the respondents identified the following equipment as being available, that is, the kit for fingerprints and photography, and many other kits which are not used. The type of kit used depends on the type of scene to be attended to. The respondents indicated that after training one is issued with a kit which, however, does not contain all tools. The photography and fingerprint kit has the items summarized in Table 4.2.

Table 4.2: Tools and equipment available

| Fingerprints/ Fingermarks | Photography |
|--|---|
| <ul style="list-style-type: none">• Lifting tape• Copex (for mounting the lifting tape)• Brush• Scissors• Magnetic powder for developing fingerprints on paper• Tape for recording• Aluminium powder• Gloves• Swabs• Tape | <ul style="list-style-type: none">• Small cab• Fuming chamber• Painting machine• Dark room• Chemicals• Camera (Digital and film colour)• Photographic tools and section |

4.4.2 Adequacy of facilities

A majority (9) of the respondents stated that the facilities and tools are not adequate to deal with the common cases and scenes of crime satisfactorily while 3 indicated adequacy of tools (Box 4.4). The respondents indicated that the equipment available for use is not supplied directly but collected from the government chemist. They, however, said that kit one (basic kit for any forensic expert) is only adequate to deal with minor crime scenes and not the major ones. The modern evidence collection kit (Appendix V, C) was reported to be currently unreliable and not being used for it can be corrupted and lose data. Some of the equipment not available is sometimes brought from abroad by well-wishers.

Box 4.4: Adequacy of investigation equipment

Case 1: We do not collect all the information due to lack of equipment (cameras, films, aluminium powder) because machines used for processing are ancient and if you use carbon black you need to photograph it first. (Forensic investigator 5)

Case 2: Lifting tapes, lens, scale, glove, masks, swabs and ammonium solution are not provided by police but have to be sought from the government chemist. The other things that we have to use but are never provided by the police include packing material, bottle (plastic, glass), labels and seals. (Forensic investigator 3)

Case 3: The facilities are not adequate for most are brought by donors and others are got from outside countries hence the process of getting them becomes a challenge. (Mr. Forensic investigator 9)

Case 4: Some facilities that we lack are bought by well-wishers from abroad but those cannot adequately take care of our needs. (Forensic investigator 9)

Case 5: The photography and fingerprint kit is adequate to deal with minor cases of burglary and here the lifting tapes could be out of stock and you might lack the necessary powders while at the scene and you are forced to get some evidence while you overlook the rest that you are not able to collect. (Forensic investigator 10)

Case 6: We do not even use the modern kit currently because it can be corrupted and you end up losing very sensitive and important data. (Forensic investigator 2)

4.4.3 Available technology

In response to the question on availability of technology all respondents indicated that the available technologies are only relevant for finger printing and photography. They pointed out that the technology is old. The respondents also pointed out that they use aprons instead of specialized attires for crime scene investigations. This leads to the contamination of the scene as shown in Box 4.5.

Box 4.5: Available technology

Case 1: For finger prints, we only do the dusting of the visible finger prints and their manual uplifting. For photographs we use ordinary and digital cameras which have normal lens (Forensic investigator 1).

Case 2: We have and use aprons and not the specialized attires for the scenes of crime hence contamination of evidence is high. (Forensic investigator 3)

The respondents stated that they did not use any modern technology. They, however, said that there are fingerprint machines known as digital Ruvis work station or Ruvis fingerprint work station which is not used at the scenes of crime for it's a new technology with several procedures to follow.

4.4.4 Supply of new facilities and technology

The majority (8) of the respondents indicated that new technologies had been introduced while 4 were of a different opinion. Some of the new technologies stated include the introduction of Ruvis machine, which had been newly introduced but was not being used. They indicated that there was a shift from iodine fumes to aluminium powder for dusting finger marks (abandoned because of its harm) and use of digital cameras which has allowed colour photography (Box 4.6). All the respondents indicated that they rarely get new technologies and tools but in case they get them they are sub-standard. The findings of the study suggest that if a new technology or tool is introduced, then the investigators undergo training at the CID Training School.

Box 4.6: Supply of new tools and technology

Case1: Since the time I joined the department there has not been introduction of any new technology and I have been here for 3 years. (Forensic investigator 11)

Case2: In case we have a new technology, the supplier of the technology teaches us on how to use it. The ones who are present are the ones who are taught. The ones who are taught teach others. Practically you need a lot of time to use new machines but that time is not there. (Forensic investigator 5)

Case 3: When the use of DNA was introduced I underwent training on sample collection but there were no facilities then; however, a machine was donated recently. (Forensic investigator 12)

On what they do in case the facilities and technology they require are not available, the respondents had different responses which indicate that it is upon the expert to decide on what to do. According to Forensic investigator 3, “one does what one can with what one has and leaves what one cannot do. So much of the evidence is not collected due to limitation on equipment. A lot is not collected due to lack of facilities. You just leave them and don’t expect someone to question your findings and actions”.

From the key informants, it was clear that tools are available for different departments depending on the type of crime and analysis needed.

Facilities are generally available for all experts to utilize even though some are not found at all stations, and hence it is tricky to say they are accessible. After the basic training the experts are issued with basic tools and others are added as per the acquisitions by the government. (Key Informant 1)

These facilities and technologies are very expensive and this is a big challenge in purchasing of new facilities required on the ground. From time to time government supplies the equipment but there is the challenge of finances and low budget. Also, there are departments that are given priority due to the emerging issues in general security. (Key Informant 2)

4.5 Structures of investigation

4.5.1 Number of officers involved in investigation

There were mixed responses on the number of officers involved in investigation with a majority (6) of the respondents citing 3 officers and 2 respondents citing 2, 4 and 5 officers for each category as the number of officers involved in forensic investigation per case . All respondents emphasized that the number depended on the type of crime scene. The core people identified

were the first respondent (police officer on the ground), investigating officer and relevant forensic expert.

4.5.2 Departments involved in forensic investigation

There were mixed responses on the number of departments involved in forensic investigation. From the responses, the number of departments ranges from 3 to 8. The responses with the highest frequencies were 5, 6 and 8 departments with a frequency of three each. These departments are: Scenes of crime, ballistic, fingerprint comparison unit, document examination unit, photography and video unit, cyber-crime unit, criminal investigation unit (electronic gadgets especially phones), and bomb disposal unit. This is summarized in Table 4.3 below. From this finding it is clear that the majority of the experts (9) are not aware of the total number of departments involved in forensics.

Table 4.3: Number of departments involved in forensic crime investigation

| Number of departments involved in forensic investigation | Frequency of responses from experts |
|--|-------------------------------------|
| 3 | 1 |
| 4 | 2 |
| 5 | 3 |
| 6 | 3 |
| 8 | 3 |

4.5.3 Duration of forensic investigations

There is no specific time frame for forensic investigations. All respondents indicated that the time frame depends on the type and technicality of the scene and the person involved. It was also

reported that forensic experts come to court at later stages of the court hearings and usually have their names listed among the last to testify. Sometimes the court process takes long prolonging the duration as illustrated in Box 4.7.

Box 4.7: Duration of forensic investigations

Case 1: The process of linking the suspects and the evidence is long hence it can be time consuming due to facilities which are old and logistics... It depends on the type of case but the case by the investigation officer should be taken to court in 24 hours. Sometimes finger prints analysis can take a year. A photograph can take a day. If the case is delicate it could take 2 days to 1year. (Forensic investigator 1)

Case2: Forensic evidence analysis is done manually and it takes a week if the suspect is available. If there is no suspect the finger prints will be compared to the records at the CID and can take months or years. (Forensic investigator 5)

4.5.4 Standard procedure

The study sought to know if there were any standard procedures followed by forensic experts in Kenya. The majority (8) of the respondents indicated there were no standard procedures in place. For crimes such as burglary, robbery or murder there is no specific procedure for handling the crime or crime scene though there are key activities known to the investigators that should be done in the investigation process for easy identification of the exhibits and reduction of foreign materials which might compromise the scene. The key activities are dependent on the type of crime being investigated as shown in the statements below. It was also reported that though there are no specific procedures, the key activities also depend on the type of the scene being investigated and on the experts and that every expert approaches the scene in a different way. According to Forensic investigator 10:

For death investigation one needs to check the entrance of the scene and exit if it is inside a building, then you photograph the scene at the entrance and exit. You divide the scene into sections and start from the far end and march towards the scene, as you mark the evidence and collect. You photograph the body first and then take the fingerprints of the person. If the hand is stiff you add iodine solution to water to make the hand and fingers soft then release the scene to the investigation officer. For finger marks you apply the chemicals to visible marks and lift the prints and in the case of house break-ins you photograph the general view of the entrance and close-up photos then consider the entry and exits. If the surface is good to get fingerprints at the entry point you do the dusting. Due to shortage of technology in Kenya one can only get prints from smooth surfaces.

However, four respondents indicated that there were specific procedures to be followed in investigating a crime scene. There is a general procedure given during the trainings which should be customized to suit the crime scene. The respondents emphasized that the procedures depend on the type of scene. They also indicated that strict adherence to the procedures depends on individuals for those procedures are not documented for different crimes and crime scenes as shown in Box 4.8.

The investigation procedures are scene and crime specific though the expert trainings have a general perspective. The actual handling of the scene is also dependent on the expert handling it. A number of experts reported lack of specific procedures and talked of key activities depending on the type of crime being investigated as well as the scene.

Box 4.8: Testimonies of procedures followed based on crime scene

Case 1: The safety of the officers and people is the priority. The general approach is to assess the scene and check if it is safe to enter. Initiate rescue if there are injured victims then cordon off the scene, scan it and assess if you need more experts. Interview the people present at the scene as witnesses and if the people are many at the scene call for reinforcement. Then divide the place in section (zones) in order to deal with the smaller unit. (In real sense it is not done due to people around and security). Search for the evidence and collect. Document all the collected evidence and label it, package it, then scan the scene again and declare the scene as clean for people to occupy. (Forensic investigator 5)

Case 2: We follow the word SCENE:

Secure –make sure the scene is secure for you and the victims.

Cordon-cordon off the scene by allocating officers to do so in order to secure the scene.

Evidence –interview the witnesses and collect the evidence.

Notes –identify the important witnesses and take notes.

Evaluate-evaluate the scene. (Forensic investigator 6)

4.5.5 Protocols followed

There were mixed responses on the protocols followed when conducting an investigation involving scenes of crime experts. Eight respondents indicated that there are outlines which need to be followed when carrying on investigations (Box 4.9). The outlines, however, are only in books but not in practice. Four respondents stated that there were no protocols to be followed during the investigation.

Box 4.9: Protocols followed during investigations

- i. Reporting of the case to the police station
- ii. Officer in charge assigns someone to visit the scene
- iii. They then call for involvement of forensic experts
- iv. If the finger marks are visible they then ask for elimination for people who have legitimate access to the area
- v. Investigation officer records statements from the complainant and witnesses
- vi. They have to wait for the results from lab officers and if the results are positive the offenders are arrested and charged.

It was also reported that in case of mixed prints of the suspect and the people with legitimate access, then all subjects involved are treated like suspects in order to eliminate as per the list of complaints. It was also indicated that forensic investigation must be done by the CID and trained officers and must follow police procedures. In real life, it was reported that though the protocol is followed, at times the experts are sidelined due to conflict of interest in the case and power imbalances (Box 4.10).

Box 4.10: Protocols followed in specific cases

Case 1: In case of mixed prints of suspects and the individuals with legitimate access then the investigator has to treat all like suspects in order to eliminate as per the list of complaints. The investigation must be done by the CID and trained officers and must follow the police line.

Case 2: In real life, the expert is at times sidelined or compromised due to the conflict of interest in the case and power imbalances.

4.5.6 Content of a forensic report

The findings indicate that there are forms to be filled by the expert, for photos there is a report, for finger marks there is scene of crime report C46 (Appendix iv) and for exhibits one fills the exhibit memo form 6 (Appendix v). The following are the key things to be included (Box 4.11).

Box 4.11: Content of forensic report

- Explain the scene of crime on what happened and make the people understand
- Indicate the type of alleged crime
- Indicate the time the crime was committed and place
- Indicate the officers involved, the officer who notified you and if you went on your own give an account of how you knew about the case
- General description of the scene
- Go into detail on the evidence found and the process which you used to collect the evidence
- Certify the documents as a person who has been allowed to do that by the Attorney-General

4.5.7 Policies available for forensic investigators

The majority (8) of the respondents indicated that there is a policy which governs forensic investigation, 3 respondents did not know there was any while one respondent indicated the presence of policies guiding the practice. However, the one who indicated the presence of a policy could not cite any specific policy or details of the policy but referred to guidelines under the Evidence Act which address matters relating to the training and practice of experts.

From the key informant 1 and 2 interview responses, it is evident that the protocols that are followed are for general police officers and there are no policies that are crafted for forensic investigation.

The available protocols apply to all police officers when conducting an investigation and the crime scene investigators are not exceptional. (Key Informant 2)

There is no policy document for forensic investigators. (Key Informant 1)

CHAPTER FIVE

PRACTICE AND EXPERIENCE

5.1 Introduction

This chapter presents findings on the practice and experience of forensic experts in Kenya. It describes the practice and other variables that affect the performance of the forensic experts and how they relate to each other.

5.2 Practice

There are few national and international practices in forensics including the core disciplines of anthropology, odontology, forensic pathology others. These standards cover local practice but probably America has gone the furthest in setting standards for different types of postmortems (Hutchins, 1994).

In America the pathologists have gone a notch higher in setting up standards for different types of postmortems. One of the major standards alongside the Minnesota Protocol is the Interpol Disaster Victim Identification Form Set. These established documents are to be followed by any developmental operational practice in international domain. The last one in particular, has been understood by police forces around the world for it has been used countless times and has an established structure which keeps it under review (Hutchins, 1994:20).

5.2.1 Relationship between training and practice

Hypothetically there is supposed to be a relationship between the training and what one does in the field. For training to be relevant it should be able to meet the needs in the field. However, the findings of this study suggest that there is no relationship between the two.

It was evident from the respondents that they are trained with better facilities but these facilities are not available at the stations of work hence they cannot utilize all the skills acquired while in training. The respondents reported that there should be a relationship between the training and practice in the way you have been trained hence the better trained you are, the more you should be efficient in the field. The more you undergo the training the more you are able to handle the scene of crime. However, they noted that lack of equipment may make the practice inefficient.

The respondents acknowledged the importance of thorough training. They alluded to the fact that the more training one gets the more one is equipped to handle the scene satisfactorily. This is illustrated in Box 5.1 below.

Box 5.1: Relationship between training and practice

Case 1: The training and practice is different from how the issues are handled from investigation to submission in court. At the time of training you get a lot but you do less in the field for there are no facilities for practice. (Forensic investigator 7)

Case 2: We are trained with very good equipment but in the field one only gets simple kits for dusting finger marks and photographing since these other equipment are not available. The more you attend training, the more you are equipped to handle the scenes well compared to the one with less training. (Forensic investigator 5)

Case 3: The training and practice are related but the facilities which they were trained on are not available at the station and for practice hence there is a disconnect. The more you undergo the training the more you are able to handle the scene well. (Forensic investigator 2)

Case 4: There is a relationship but not in all fields for some procedures are not followed due to inadequacy of technology and facilities. At the training the technology is different from what you use in the field. There is a big disconnect between what one is taught and what is on the ground for many things keep on changing hence there is also learning while in the field. (Forensic investigator 1)

5.2.2 Relationship between experience and performance

Experience is expected to bring perfection of the skill and make one an authority in one's field, but sometimes the contrary takes place. From the excerpts, it is noted that new officers are not able to handle the scene due to fear of the unknown, but with time they develop courage and become exposed to different scenes and cases. The more one is exposed to the field situations, the more one is able to solve issues in a more practical way than the newly trained.

Some respondents reported fear of handling crime scenes due to the challenges faced in the field. They indicated that the crime scene makes one more careful and more observant at the scene for some of the cases might raise international concerns hence the challenges from previous experiences enable one to perfect one's skills. It was, however, noted that though experience comes with courage and expertise some new trainees are getting advanced training which was not available in the previous trainings to other officers. The new trainees therefore get more exposed to new facilities and new technologies.

Experience as reported enables one to make appropriate decisions on what to do and be able to know how to do it, for example, in photography and finger marks. It is evident from the findings that experience makes one confident and how to use the apparatus well. The more one attends the scenes which are similar, the more one gets the experience to handle them courageously and

in a specialized way. The more one has been in the field the more one learns and improves on one's skills. This is illustrated in Box 5.2 below.

Box 5.2: Testimonies on experience and performance

Case 1: Experience makes one have confidence in what one does at the scene for it secures the case in court. Experience matters on what is supposed to be captured at the scene. If I can go back to previous cases I can produce a good report due to the experience as a general investigator and forensic expert. (Forensic investigator 2)

Case 2: What you are taught is different from what you find in the field. Experience helps you to handle the scene according to the facilities you have and how others do. With time one is able to join the occurrences and be in a position to deduce what could have happened. (Forensic investigator 1)

Case 3: At the time of the post-election violence I was on the ground collecting evidence but I feel that I did not give it the intensity it required. When the International Criminal Court got involved I am now keen on what I do at the crime scene. (Forensic investigator 3)

Case 4: Experience doesn't matter for you might be practising old things which are not applicable now. What matters is the type of training you have undergone. (Forensic investigator 1)

Case 5: Due to attending scenes which are alike one becomes familiar with the scenes and the concept of panic and losing focus is reduced, e.g., in cases of homicides and murder scenes. (Forensic investigator 5)

5.2.3 Rank and attitude of experts

In every field there are different ranks and categorizations. This is no exception in the police service. It was, however, reported that the ranks apply to the police but not to the scenes of crime. There are no ranks in the crime scene yet ranks are used by police officers for administrative purposes. Investigators were initially selected from the police inspectors' ranks but now even constables are picked. The highest rank in the sector is a Senior Superintendent but the one in charge of forensics is a Senior Assistant Commissioner. Respondents indicated that there are some changes being implemented in the department to make it work as a semi-autonomous unit and they might get rid of ranking in the Directorate of Criminal Investigation.

The respondents were asked to give their opinion as to whether the forensic investigators are different from other police officers in the service. The findings are divided into four sections, namely, how they feel about their duties in relation to other officers, how the public views and treats them, how other police officers view them, and how the administration takes them to be. There were numerous responses, which is an indication that the experts viewed themselves as being different from others due to the training they had undergone on top of the training for all police officers. The respondents indicated that the public viewed them as experts in their field for they attend to scenes when other police officers are at a distance watching.

The respondents indicated that other police officers view forensic experts differently and they give them In addition, the police officers view the experts as important since they know more about the crime scene and other officers keep on consulting with them on what is to be done at the crime scene even before they arrive.

The respondents indicated that the bosses in charge have mixed opinions on their expertise but it is evident that they are treated as experts irrespective of sometimes being treated by bosses as junior officers due to superiority and power struggles. This is illustrated in Box 5.3 below.

Box 5.3: Testimonies on rank and attitude of officers

Case 1: There are no ranks for forensic investigators but we are ranked as the other general ranks for all police officers. If you want to get a new rank you have to go for another training which is not for forensic investigation but for all police officers at Kiganjo Training College or General Service Unit. (Forensic investigator 2)

Case 2: We are different from others in service because we are under the Directorate of Criminal Investigation and we have undergone specialized trainings hence we cannot be taken to other departments. Also we have been gazetted by the Attorney-General hence you have to be in that section. We are able to tackle what other officers cannot for we have been trained to handle the scenes. We have the equipment to attend to scenes and therefore able to do a thorough scenes examination. (Forensic investigator 8)

Case 3: we are viewed to be different for a lot is expected from us when it comes to where we are involved. We have been nicknamed photograph people for the photographs have been very efficient. The public treats us as experts and sees us to be the ones who help to solve crimes. They respect and trust us for they take our decisions as being final due to their confidence in what we do for we are not seen as mere police officers but as experts. (Forensic investigator 5)

Case 4: At the scene other officers step aside and pave way for us to take over irrespective of my lower rank up to the time I finish. This is also reflected in the sitting position in the vehicle in which the expert must occupy the front seat. Other police officers consult with us on what to do and what to be taken as exhibits. Some of the officers are cooperative and they see us as people of more value than them due to advanced training. When we submit the evidence they just take it without questioning and follow the command of the experts even if it is from a junior officer. (Forensic investigator 1)

Case 5: Rank is a challenge for they feel that at the time of reporting the Officer Commanding Station (OCS) informs the Officer Commanding Police Division (OCPD) for he is the one only allowed to do briefing to the media. However, sometimes the OCPD cannot technically explain what went on at the crime scene. At the forums we are treated as experts who know a lot compared to the other police officers. The bosses know that we are different from them but they disregard that due to fight for superiority. (Forensic investigator 12)

In conclusion, there is a high relationship between training and practice irrespective of the gap due to the inadequate facilities in the field. Also there is a relationship between experience and performance of the experts while in the field. This implies that the more one has been in the department and the exposure to the different types of crimes the more one gets to perfect one's skills. In regard to rank there is no spelt out format for recognizing and ranking experts in the police service apart from the one used by all officers. The more one is in the field practising the more one becomes competent on what one does.

CHAPTER SIX

ETHICAL ISSUES AND CHALLENGES IN CRIME SCENE MANAGEMENT

6.1 Introduction

Every professional field is expected to have its code of conduct which all its members abide by. At the same time their work should be sensitive to issues of international human rights. In this chapter these three issues are addressed in terms of their impact on the effectiveness of crime scene investigation.

6.2 Code of conduct

6.2.1 Available code of conduct

From the findings there are no documented codes which are specific for forensic investigators. For example, Forensic investigator 2 indicated that so far there is no code of conduct for forensics that he has come across while in the service. He stated that they only operate under the Police Code of Conduct which is documented in the Police Act. All that is available are general rules but they are not specific and hence not fully adhered to. This finding was strengthened by the key informants' 1 and 2 responses.

There is no specific code of conduct for forensic investigators but this does not mean there are no codes at all. (Key Informant 1)

They are supposed to observe the general police code which all police officers abide by. (Key Informant 2)

6.2.2 Effect of code of conduct on performance

In the absence of specific codes of conduct for forensic investigators the researcher inquired into how the current general Police Code of Conduct affects the conduct of forensic investigators.

The findings indicate that absence of a specific code of conduct for experts has got much effect on the behaviour of the officers since the general police code does not address the issues of crime scenes. Forensic investigator 10 indicated that since there are no written codes for investigators, they respond to investigation for scenes of crime just like any other police duty and one is expected to adhere to the police code of conduct. The police code, however, only enables them to secure the scene in order to avoid contamination of the evidence. But this limits their performance since crime scene investigation involves much more than just securing the scene. It involves identification of certain facts such as knowing who was involved, when and how.

It is clear from the respondents that the Police Code of Conduct provides the procedure in handling the exhibits. This procedure addresses who collects the exhibits, who it is handed over to (expert on ground or investigations officers in the shortest time possible), how it has to be taken for analysis and how the results will be collected from the analysis unit. This code of conduct is, however, seen as limiting since it is general to all police operations and it has not been customized for crime scene investigation.

Both key informants emphasized that the police code of conduct is important for this is a disciplined.

The Police code of conduct is very important for it enables us to have order at work. This enables the officers to know what needs to be done and the procedure to do it. (Key Informant 2)

However, there is no code of conduct specifically for forensic experts and this is a challenge for they all follow the general code for the police. I think if there was a code for forensic experts it would be good and easy to coordinate for it is a small team.(Key Informant 1)

6.2.3 Systems to check adherence to code of conduct

Ideally there should be a way in which the National Police Service checks on adherence to the police code. From the findings a majority of the respondents indicated that there is no system in place to check on what they do on the ground, and so it depends on the individual's discipline while at work. According to Forensic investigator 8 there is no way of determining if the officer did what was required or not. However, if there are complaints from interested parties, another officer is sent back to the scene to check for more information and gather more evidence. Generally, all respondents indicated that there is no system to check adherence to the code and the way to attend to scene because nobody makes a follow-up on this. However, one could be disciplined for not working according to the code if reported to the bosses. One key informant indicated that if an officer breaches the code they would face disciplinary action. Both key informants insisted that the available system is one which the officer in charge of the department gives reports on all the officers and in case they report the officers to the higher offices. These officers are summoned to give an explanation as to why they do did not adhere to the code of conduct.

6.3 Ethics

According to Cordiner and Mckelvin (2002:879), Whenever there are pressures to deviate from the technical standards and ethical issues the best practice guideline facilitates the observance of agreed. These guidelines serve as objective standards against which individual national standards may be compared. They need to be circulated and promoted by all forensic community and should include reference to the use, wherever possible.

6.3.1 Available code of ethics

The respondents were asked if they have any code of ethics which they follow as forensic experts while in the field. The findings indicate absence of a documented working code of ethics. While nine respondents stated lack of ethical code, three indicated that there are ethical guidelines for their practice. According to Forensic investigator 5, there is no written code of ethics in forensics for this is a section which is growing. Forensic investigator 2 differed with this statement by indicating that there is a code of ethics to be followed, although it is not clearly explained to the investigators. Therefore, they use personal inference in decision-making abilities on what should be observed. Key informant 2 stated that there is no documented code of ethics that is specifically for forensic investigators. Key informant 1 emphasized that all officers needs to conduct themselves in a decent way and they should respect others.

6.3.2 Ethical dilemmas

In every field there are ethical dilemmas which the experts face while in the field. From the findings it is evident that forensic experts encounter ethical dilemmas in almost every case while in the field. One kind of dilemma is on the issue of body dignity on how to handle the dead human body at the scene of crime. The other ethical dilemma which stood out is the tampering of the scene of crime and planting of evidence at the scene of crime when the experts arrive at the scene. These dilemmas are frequently encountered within different settings and are therefore diverse in nature. All the respondents shared the same sentiments as exemplified by the narrations of forensic investigators 6 and 2 cited in Box 6.1 below.

Box 6.1: Testimonies on ethical dilemmas in forensic investigations

Case 1: Imagine a dead body of a woman and you are a man on an investigation. You are supposed to check on the injuries and so you will need to take close-up photos and take the body to the mortuary and then undress the body and make the necessary assessment. This constitutes several dilemmas especially on body dignity. Sometimes due to lack of transport some bodies might be brought to the station for photographing. (Forensic investigator 6)

Case 2: When there are many people interested in the scene they might mislead you on what to do and therefore compromise independent findings. There is tampering with evidence and sometimes you find that some evidence has been planted and you might be denied to record the serial number of the gun. The boss on the ground might tell you what you should do and they command you to work faster than you would have done. (Forensic investigator 2)

6.3.3 Applicability of code of ethics in investigation

On the question of their opinion on the applicability of the code of ethics, the respondents indicated that the code of ethics would be important in outlining the ethics which need to be observed in cases of ethical dilemmas at the investigation scene. The respondents reported that the code of ethics would make their work easy. Forensic investigator 5 indicated that if the code of ethics was applicable, this would make the process enjoyable and enable one to come up with a good report on the scene. He added that there should be uniformity in all sections in the police service for all officers to know. He also stated that there should be guidelines on how the officers should behave at the scene and how to preserve the scene. He concluded by suggesting that there should be a code of ethics for officers and experts to operate with for this will enhance the integrity of the scene.

6.3.4 Systems in place to solve ethical issues

The respondents were asked if there is a system in place to address the issue of ethics in forensics. While ten respondents cited absence of a system to solve ethical issues, the remaining

two stated that there is a system in place. The researcher inquired further into how they solve ethical dilemmas and all respondents, including those who had said there is a system, reported that it is upon an individual conscience on what to do if one is faced with ethical dilemmas while in the field. From both key informants it is clear that there is no system in place in addressing the ethical dilemmas. Both of them stated that this is a big challenge due to the ethical issues that arise while the experts are conducting the investigations.

6.4 Human rights

The concept of human rights is an old concept; in fact, it was the event of Second World War that pushed the world to pursue clarification. UN General Assembly responded by writing the Universal Declaration of Human Rights and formally adopted in 1948. In brief, the articles proclaim that all people are entitled to fair and public hearing. The document also advocates for presumption of innocence until proven guilty, privacy, freedom of movement, a nationality, a family, property and many more (UN,1988). Human rights are therefore essential for all individuals. ‘These rights are violated when persons are treated as objects or as a means to others’ ends. Offenders have enforceable human rights (Birgden and Perlin, 2008, 2009; Perlin and Dlugacz, 2009). This section looks into human rights provisions and how they affect forensic investigations.

6.4.1 Rights of suspects

Respondents were asked if they knew of the rights of suspects during interrogation and acquisition of biological samples. These were listed as shown in Box 6.2 below.

Box 6.2: Rights of suspects

- The suspect has a right to access the documents pertaining to the case.
- The suspect has a right to know and be informed why the samples are being collected.
- The suspect has a right to inform their lawyer on the basis of the crime.
- The suspect has a right to inform the family.
- The suspect has a right to a state counsel (except for murder).
- For any biological samples it has to be done in writing to the suspect and hence to be collected by an officer of a rank of inspector and above.
- The suspect has a right to be told of their offences and not handcuffed.
- The suspect has a right to be given ample space and if they wish to have a lawyer.
- The suspect has a right to know they are linked to the evidence.

6.4.2 Effects of human rights on investigation

On questioning whether human rights issues affect the process of forensic investigation, five respondents indicated that they do, another five respondents were not aware of how human rights affect crime scene investigation, while two respondents indicated that human rights issues did not affect the process of investigation. For those who had indicated that human rights affect the nature of investigation and how this is the case, they gave the responses listed in Box 6.3 below.

Box 6.3: Testimonies on how human rights affect crime investigation

Case 1: Human rights affect forensic investigation for there are some steps/procedures which might be combined so as to beat the time limits provided by the court. The requirement to beat timelines, though a human right, can compromise or make a case weak. (Forensic investigator 2)

Case 2: Issues of human rights do affect for they compromise the state of the case. These protect suspects from being arrested or detained. In such cases, the suspect can disappear or even interfere with some critical evidence. (Forensic investigator 5)

6.4.3 Systems in place to solve human rights issues

It is expected that in all organizations dealing with humans, the aspect of human rights should be a priority and there are systems in place to check if they are adhered to in order to uphold human dignity. Especially in investigation, it is expected that human rights should be at the forefront, hence the need for systems to check on that. From the findings, all the respondents indicated that there is no system in place to check adherence to human rights. This is evident in text Box 6.4 below.

Box 6.4: Testimonies on the systems in place to solve human rights issues

Case 1: There is no specified system in place to check on adherence to issues of human rights. It is a self-conscious system in which the investigator is responsible for what happens at the scene. (Forensic investigator 2)

Case 2: There is no system in place to address issues of human rights in forensic investigation but we have standing orders in general police unit. (Forensic investigator 1)

Case 3: I am not aware of any system in place for upholding issues of human rights. There are no set systems and procedures to have the checks and balances on adherence to human rights. (Forensic investigator 10)

In the absence of a system to handle human rights issues, the respondents were asked about how they solve issues of human rights while they are performing their duties of forensic investigation. From their responses it was evident that the experts apply their individual knowledge on issues of human rights. This is seen from their responses for if a suspect refuses to give the samples willingly they use necessary force to get the samples.

6.5 Challenges faced by forensic investigators

The respondents were asked about the challenges that they face while on duty. All of them indicated that they face a number of challenges. They pointed out that there has never been

enough manpower in the department. They stated that Kenya has had less than 400 experts since the time the forensic department started. It was also reported that Nairobi has less than 30 crime investigation experts.

Another challenge is lack of modern crime investigation equipment. Even when the equipment is available, there is not enough of it. The respondents also identified the challenge of mobility to the crime scene with only one functional vehicle serving the whole of Nairobi County. The experts emphasized that the biggest challenge is in training since this is limited; they are not exposed to new skills from other experts and only a few attend those trainings and they do not share their knowledge and skills with others. They also stated that they face challenges regarding how the first witnesses (officers on the scene) handle issues and at the same time the public is not informed on how not to compromise the scene. This is seen from their narrations in Box 6.5.

Box 6.5: Testimonies on challenges faced by forensic experts

Case 1: The challenges we face are very many. In the first place, there is inadequate transport since there is only one vehicle in Nairobi. The vehicle is very old and in poor condition. Secondly, the equipment is inadequate to collect samples at the scene and we end up using crude methods. The training facilitates are different from what we use in the field. This is because the trainers are hired from abroad and they leave only a few pieces of equipment behind, if any. Furthermore, such equipment is not in the local market. (Forensic investigator 1)

Case 2: Changing weather conditions are also a challenge due to limitation of technology. Thus, at times we have to wait for the weather to be favourable to enable us collect the samples. There are few pieces of protective equipment and sometimes an officer is forced to buy their own, for example, gumboots, tape and dust coat. (Forensic investigator 5)

Case 3: There is shortage of modern equipment and at the same time there are no leaders who have passion to lobby for modern equipment. There is failure in leadership, suggesting that they are not performing their duties as expected. (Forensic investigator 10)

Case 4: The experts are not recognized by the type of work they do and to make it worse we are not motivated while in the field. With the public, there is total lack of knowledge on how to handle scenes. (Forensic investigator 7)

Case 5: There is shortage in personnel to respond to all crime scenes adequately. There are few trained experts in relation to the demand of forensics in the field. The experts are overwhelmed by the work for they are few and more so only one car is available for the experts in Nairobi. There is also inadequacy of equipment. (Forensic investigator 2)

6.6 Efforts to solve the challenges by the government

The experts were asked if there is any effort to solve the challenges in question by the government. There was mixed reaction; while six respondents indicated that there are efforts by the government to solve the stated challenges, the other half (6) had different opinions.

The respondents were further asked to narrate on how these challenges have been solved over time and their responses are shown in Box 6.6 below.

Box 6.6: Efforts to solve challenges in crime investigation department

Case 1: There are no reasonable forthcoming efforts seen whereas they are trying to recruit new officers but still the number is relatively small. In terms of training and workshops, they are trying but there is not enough time for comprehensive training due to shortage of time and availability of experts. They try to do repairs and maintenance of the vehicle but it keeps on breaking down almost every moment. (Forensic investigator 3)

Case 2: There has been minimal effort to solve these challenges for the ones who have been delegated with the mandate of procurements of the equipment do not have the knowledge of what happens in the field hence bring substandard facilities and sometimes the ones which cannot be used. The people doing procurement have no idea of the specifications and needs to be addressed for the equipment being purchased. (Forensic investigator 8)

Case 3: There has been very minimal effort due to shortage of finances for training and purchase of equipment. In particular there is no forensic lab. (Forensic investigator 10)

Case 4: There are plans to start a forensic lab and to invite foreign experts into the country and also reduce the expenses. The experts are from different countries. (Forensic investigator 1)

Case 5: More so officers are being recruited into the department and the recruits are taken abroad for training. (Forensic investigator 5)

6.7 Opinions on how to address the challenges faced by experts

The respondents were asked of their opinions on how to solve the challenges they encounter both within the department and while in the field. They identified the following actions which they

were optimistic if implemented will enable them to achieve their target: modernizing the department and strengthening court cases, as summarized in box 6.7 below.

Box 6.7: Opinions on how to address the challenges faced by experts by the Key informants

There is need for proper policies to be put in place and creation of awareness to the parties involved which calls for new trends in the department. The government needs to recruit relevant experts who are well informed of forensics and ones who are frequently in the field for in-service training. Also the trainings should be made frequent and competitive on the issues of crime and how to solve the emerging trends of crime.

The government needs to invest heavily in issues of national security and forensics, in specific terms by building a forensics training school which is well equipped with modern facilities and which offers through training to the experts on issues of crime. There is great need for forensic labs in every county instead relying on the government chemist for analysis and also equip all sections as per their needs and be networked to make the process effective and fast.

The government has the duty to enlighten the public on the issues or forensics and there is need for forums with the public on how to safeguard the crime scene and how to react to incidences of insecurity and crimes.

The department needs vehicles which are customized as mini labs for simple analysis to suit the needs of the scenes of crime. Also equipment should be light to carry and effective ones for field officers to access areas which are not accessible by vans.

In conclusion, it is clear that there are no systems in place to address issues of human rights and code of conduct. Also there is an absence of mechanisms to address ethical issues during investigations. This suggests that the experts are likely to break the code and also deny the accused their rights. This being a disciplined career it requires specific guidelines for it to render services to people and at the same time with integrity and observing human rights. In relation to challenges the government has not invested in the department for the officers do not have modern equipment that can be used efficiently to respond to the crimes committed. This implies that the experts are really straining to handle crime scenes with minimal resources and system to check on how they perform their duties.

CHAPTER SEVEN

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This chapter discusses the findings of the study and then draws conclusions from the findings. The chapter ends with the presentation of recommendations in relation to the conclusions and areas for further research.

7.2 Discussion

7.2.1 Process of forensic investigation in Kenya

In Kenya issues of forensic investigation lie with the police under the Directorate of Criminal Investigation. The Directorate's headquarters are in Nairobi but it has branches all over the country. Scenes of crime is under forensics and has eight departments, namely, scenes of crime, ballistic, fingerprint comparison unit, document examination unit, photography and video unit, cybercrime unit, criminal investigation unit (electronic gadget, especially phones), and the bomb disposal unit. Scenes of crime is the only sub-department which is on the ground and are the ones who visit crime scenes and collect physical evidence that may be related to the crime committed. They also document and record the scene by taking photographs. The scenes are referred to the field officers before the handover to the lab officer. This implies that the field officers are very vital in the process of forensic investigation in any case. Kenya compares with many countries in which issues of investigation by forensics are done by the police but in America they incorporate experts who are outside the police department but collaborate (NAS, 2009). This aspect of inclusion of experts who are outside the police service is not in Kenya as it was stated by respondents that one of the requirements is that you must be a police officer.

From the findings it is clear that the department is dominated by males aged 18-39 with the ranks of copral and constable. In a single case there is a minimum of three officers involved (first officer to arrive at the scene, investigating officer and forensic expert). The experts are required to fill a standard form C46 for finger marks and exhibit memo form 6. The findings indicate that there is no specific time frame for forensic investigation for all respondents stated that it depends on the type of the scene, its technicality and the persons involved.

The findings suggest that there are no standard procedures in forensic investigation. It is expected that such a department would have a standard procedure which all the experts should abide by. This is a contrast with the USA which has standard procedures on how to approach a scene, how to collect the evidence, packaging and all that is supposed to be done. The findings indicate this scenario creates a gap for investigators to do what they feel is right, thus creating room for mix-up. There were mixed responses on the protocols followed during investigation involving scenes of crime experts. Respondents indicated that there are outlines which need to be followed in the way to carry out the investigation but are only in books but not in practice. This is in line with the chain of custody which indicates how the evidence flows from the scene up to place the of analysis and the people who handle it. What is evident is that the chain of custody is not elaborate and functional for one can bypass it.

In the absence of articulated and universally accepted standards of practice and documentation of the work involved in forensics problem could arise. This is evident from the Danish-Swedish forensic teams which worked in Kosovo in 1999. The team tries to describe a template for reports modified from one used in Bosnia and adapted in Kosovo. "ICTY did not define how the results should be presented: the only instructions given were that the investigations should be performed according to 'national standards'" (Blewitt, 1997:287). In another scenario in 1999,

“the main role of a Finnish team working in 1999 was to affirm the impartiality of postmortems performed on bodies found in the village of Racak, where there were conflicting stories about the course of events leading to the deaths. For the autopsies they performed, the Finnish authors described using ‘standard methods of forensic pathology in accordance with the guidelines set by the United Nations and Interpol’, ‘whereas for those autopsies which they observed for monitoring purposes and which were performed by a Yugoslavia professor, they reported that “standard methods of forensic pathology” were employed and that “documentation was similar to that” used by the Finnish pathologists. From these descriptions, it is not clear what real differences there may have been in the methods and documentation employed, but anyone who has been aggressively cross-examined about discrepancies in medical evidence can imagine how these differences may be used to discredit otherwise sound evidence, thereby significantly undermining a prosecution case. Differences in “national standards” and practices have potential to compromise the utility of evidence for prosecutions’ (Cordiner and Mckelvin, 2002: 878).

The present study found that there appeared to be no policies which govern forensic investigation, since those who indicated the presence of policy could not cite the specific policy. Such an organization should ensure that it has their policies which contain clear statements that address all major forensic considerations, such as contacting law enforcement, performing monitoring, and conducting regular reviews of forensic policies, guidelines, and procedures. The organization’s forensic policy should be consistent with the organization’s other policies, including policies related to reasonable expectations of privacy (Kent *at al.*, 2006:19). Forensic policy should clearly define the roles and responsibilities of all people performing or assisting with the organization’s forensic activities. This should include actions performed during both

incident handling and routine work activities. The policy should include all internal teams that may participate in forensic efforts, and external organizations such as law enforcement agencies, outsourcers, and incident response organizations (Kent *at al.*, 2006:19).

It is evident from the study findings that the facilities and tools used by experts are not adequate to deal with the common cases and scenes satisfactory. This implies that there are some pieces of evidence which are left at the scene due to lack of proper equipment and tools of work. If the field officers fail to collect all the required evidence at the scene, the analyst will miss the point and might chase the wrong trail. Adequacy of equipment is vital as emphasized by the training manual used by American forensic experts. The study findings clearly indicate that the pieces of equipment that they have are not enough and they do not meet the minimum threshold as spelt out in the manual for the tools which all field experts should have (see appendix VI). Tools and the technology used by the forensic scientist depends on the type of evidence collected and the kind of laboratory. Although many scientific and allied services apply to the forensic sciences, there are common disciplines provided by State forensic laboratories (Saferstein, 1988).

The process of forensic investigation in Kenya is expected to be a system which is composed of actors and octants who all contribute to one common goal. This network of actors as cited by Jentzen and Hanzlick is that the word “system” is a misnomer (Hansen, 1995, cited in Clark, 1997), when used in the context of investigation. Based on this study, there is less “system” of investigation that covers the jurisdictions in this country. There is lack of nationally accepted guidelines or standards of practice for individuals responsible for performing crime scene investigations. Furthermore, there is no professional degree, license, certification, or minimum educational requirements, nor is there a commonly accepted training curriculum. This scenario was seen in America in 1995 where they did not have any standard for practice for medical legal

death investigator and they had to compose a consortium which had to come up with a standard (Hanzlick, 1996).

7.2.2 Level of training and expertise of forensic investigators

“Science is the heart of forensic science. Court decisions have emphasized that the forensic scientist must be well versed in the methods and requirements of good science in general and in specific techniques used in particular disciplines being practised. Additionally, the forensic scientist must be familiar with the rules of evidence and court procedures in the relevant jurisdictions. The knowledge, skills, and aptitudes needed in these areas are gained by a combination of formal education, formal training and experience” (Houck, 2007:10).

The point of takeoff for any discipline is the minimum qualification for one to be eligible for consideration as being specialized in that discipline. From the findings, it is clear there are no specific minimum qualifications for different individuals had their own story to tell and also different recruitment groups had different qualifications. However, what was common to the ones joining the department currently is one must have a degree in any biological sciences instead of a secondary certificate as had been the case before. Once you have those qualifications you qualify to be recruited as a police officer from either the GSU or general duty police then be posted to the Directorate of Criminal Investigation. What was common to most of the respondents is that they were first posted as general duty officers and later got a signal of the available position in scenes of crime and applied. They could not identify a clear criterion of selection for those joining now were selected while they were at the Kiganjo Police Training College or the GSU Training College. For one to be called an expert, one has to undergo a basic training course which comprises Criminal Procedure, the Penal Code, Evidence Act, DCI

structures, photography, basics in fingerprints, handling of exhibits and general scenes of crime and then later do a placement test and get a certificate. This training takes three to six months depending on the funds available from donors. “ In America initial training applies to recent university graduates starting out in the forensic field. Forensics need to recruit graduates with the appropriate undergraduate scientific background and train them, which can be a significant drain on resources within the laboratories. Initial training has both the theoretical and practical components” (Saferstein, 1988).

Historically, forensic scientists were recruited from the ranks of university graduates in chemistry or biology. Little or no education was provided in forensic sciences; all the forensic stuff was learned on the job. For many years, forensic science has been offered only by a handful of colleges and universities; in Kenya there is only one public university offering it but lacks the capacity of doing it fully. The popularity of forensics has caused an explosion in forensic oriented programme and students interested in forensic careers in many developing countries. In the past many of these programmes offered weak curricula, little science and had no faculty with forensic experience. This produced graduates who lacked the necessary skills in the discipline (Houck, 2007:11).

It is evident that officers in the department go for in-service training but not regularly. The selection of those to attend such trainings is characterized by conspiracies especially if it is outside Kenya. As noted in *Forensic science: review of status and needs of (1999)*, training for the forensic community, as in other professions, is an ongoing need. Training of novices and providing continuing education for seasoned professionals is essential to ensure that crime experts deliver the best possible service to the criminal justice system. The major impact of

training is at the professional level. While training exists in a variety of forms, there is need to broaden its scope and build on existing resources (Saferstein, 1988).

It is evident that the experts were trained with better equipment but this equipment is not available at the stations of work hence they cannot utilize all the skills acquired from the training. It is true that if you have been well trained, you will be able to do the job very efficiently, but this is limited by the available facilities and equipment. The more you undergo training, the more you are able to handle the scene of crime. It is clear from the findings that experience makes one be confident and have good interaction with the apparatus. The more you attend the scenes which are similar, the more you get the experience to handle them courageously and in a specialized way. Similarly, the more you have been in the field the more you learn and improve on your skills.

7.2.3 Systems in place to check adherence of ethics and human rights in forensic investigation

Forensic science is able to reveal information such as who committed a crime, whether or not a crime was actually committed, and what exactly took place during the crime (Barnett, 2001). If one piece of evidence is mishandled, manipulated, or misinterpreted, a person's life could be destroyed or justice go un-served. It is, therefore, important that forensic personnel allow the evidence to speak for its self without any manipulation or errors (Ayres, 1994).

The study findings indicate that there are no documented ethics to be adhered to by investigators while on duty, but at the same time the investigators face ethical dilemmas while in the field. The investigators also indicated that there is no system to address the ethical challenges in the field.

Some did not even know about issues of ethics in forensics. This provides opportunities for violation of ethics while on duty without their knowledge. Most people believe that scientific analysis provides trustworthy proof regarding the interpretation of the evidence, but what they fail to take into account is that the evidence is being handled by humans, who are capable of interpreting the evidence to best suit them (Barnett, 2001). From the crime scene it is important that forensic personnel always display good moral and ethical character, while providing trustworthy, high class forensic service (Saferstein, 2011).

“The issues at stake for forensic scientists include the importance of neutrality and independence and therefore the impartiality of forensic scientists. One should recognize the roles and responsibilities of the forensic scientist and the importance of adherence by him/her to the relevant guidelines. The forensic scientist needs to conduct him/herself in ways that do not infringe on this impartiality. Arrangements need to recognize the right of families to information. Subject to the integrity of the investigation and the wishes of families, involvement by families in the processes leading to identification will generally be beneficial. There needs to be recognition by forensic scientists of the accepted principles of protection of personal information, including genetic information. In addition, forensic scientists will need to acknowledge and understand the serious pitfalls associated with involvement in their type of work. Apart from the possibility of physical danger, forensic scientists can wittingly, unwittingly or by virtue of poor practice, participate in violations of human rights” (Cordiner and Mckelvin, 2002:879).

“The first place forensic personnel come into contact with physical evidence is at the crime scene (Holmgren-Richards, 2002). There are policies and procedures that must be abided by in order to

properly document and collect evidence (Holmgren-Richards, 2002). In order to lessen the chances of evidence being mishandled, there is a chain of custody that must be established from the beginning to the end of the investigation” (Barnett, 2001). “One reason why ethics are so important in the field of forensic science is because the results yielded by physical evidence discovered at a crime scene have a great impact on the lives of others” (Barnett, 2001).

The Universal Declaration of Human Rights is a declaration of general principles with international backing. However, although it has a moral force, it does not have a legal force. Numerous attempts to strengthen the declaration have appeared in the past. The most dynamic are the international covenants on human rights, published in 1976. Interdisciplinary committees also exist. The AAAS Committee, formed in 1976, examines the rights and responsibilities of scientists around the world and focuses on areas of conflict involving scientific freedom and responsible scientific conduct in today’s society (Gruschow, 1992). The Minnesota Lawyers’ International Human Rights Committee recognized a major need for information in international death investigation. They organized a group of forensics in 1986 to write the document, which became known as the ‘Minnesota Protocol’. The document was designed to serve as an aid to death investigation throughout the world (Gruschow, 1992).

From these study findings it is clear that the investigators know that suspects have their rights which need to be protected but there are some instances in which legitimate force could be used to get some samples. The majority of the respondents were of the opinion that the issue of human rights affects the process of investigation but another big percentage did not have any idea of how issues of human rights are involved in investigations. This creates a scenario in which there is a high chance of experts violating the suspect’s rights, either consciously or unconsciously.

This would be hard to happen if there was a system to check issues concerning the violation of human rights but the findings indicate that there is no system at all. The Vienna Declaration and Programme of Action of 1993 recognized that inherent dignity and inalienable rights of all individuals are the foundation of freedom, justice, and peace. Through global covenants, the individual rights of offenders are safeguarded against cruel, inhuman, or degrading treatment or punishment. The Declaration also provides that prisoners should be treated with humanity and dignity, and be provided with reformation and social rehabilitation. Finally, individuals are guaranteed the right to the highest attainable standards of physical and mental health, respect for human rights and fundamental freedoms in forensic and correctional systems (UN, 1988).

7.2.4 Challenges faced by forensic investigators

Different countries face different challenges due to different administrations and governance and Kenya is no exception. There are individual challenges experienced by the experts due to the kind of training they undergo. The training is not standardized or consistent of the training since the Directorate relies on donor funds. These individual challenges are seen when the experts are in the field for each investigator takes their own stand on how to attend to the scene and the procedures to be followed. There were also institutional and sectional challenges such as poor infrastructure and shortage of resources.

7.3 Conclusion

From the discussion it is clear that there is a weakness in the system in which the end product should be better crime investigation and justice delivery. When the system is weak it means that it cannot handle the workload and cannot meet the expectations and the demands of the people.

The actors are not empowered well in terms of training hence lack the capacity to handle their cases well. Also, there are no regular refresher courses for all members of the department which puts the officers at different levels of knowledge.

These issues all affect the state of forensics in solving crimes in Kenya. The directorate has not achieved its full potential for there is a disconnect between subsystems which renders it slow and somehow inefficient. This is an institution that is very crucial to the entire forensic investigation but has numerous challenges. These challenges prevent it from meeting the expectations of the public and fails in ensuring there is good evidence to be submitted to court.

7.4 Recommendations

From the conclusions the following recommendations can be made:

- There is need for a clear investigation procedure and standards that are followed by all actors in order to reduce friction and slow the service delivery.
- Experts need to have proper training and be from the smart people in society for them to be smart in their investigations.
- Initial training should also be followed by regular refresher courses of the same.
- The working ethics and codes of conduct need to be clear and outlined to avoid confusion and breach of universal human rights.

7.5 Recommendations for further research

- There is need to conduct a study on the detailed capacity of the officers to handle specific crimes in other departments involved in issues of crimes.
- There is need to conduct a study to identify the available facilities, technologies and their viable use in current crime investigations.

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APPENDICES

Appendix I: CONSENT FORM

My name is Kenneth Bundi Mbaya, and am a Masters Student in Medical Anthropology at University of Nairobi. I am carrying out a research on *The state of forensic investigation in Kenya*. I would therefore want to find out how forensic investigation is done, the facilities available, the standards of practice and how, and human rights and ethic issues are observed in forensic investigations in Kenya. All the information given in this study will be kept in the strict confidence. Thank you in advance for your cooperation.

This **consent form** gives you the information that you need in order to decide whether you want to participate in this study or not. If you agree, I will invite you for an interview and subsequent informal conversations on this subject.

The interview will take about forty-five minutes to one hour and subsequent conversation may follow at any time to clarify some issues related to the study. The interviews and conversations will be recorded on voice recorder, or in a notebook. We will not use the voice recorder if you do not like it. The conversation and interview will be private. Your name will not be used in the study. Information recorded in the note book or voice recorder will be typed onto a paper by a professional transcriber. Your privacy will be respected as the transcriber subscribes to the principle of confidentiality. Your name or any other identifying information will not be attached to the files and thesis. If there are things you do not want to mention or discuss, please do not feel any pressure to share them.

You may not receive any benefits following the completion of the study. The interview only requires your time. You may ask questions at any time of the interview or decide to withdrawal from the study, without penalty. If you decide to take part in the study, sign this consent form as shown below.

I voluntarily agree to take part in the study.

Respondent's signature _____
Date

Researcher's signature _____
Date

If you agree that the conversation be recorded on a voice recorder, please sign below. I consent to the recording of this conversation on a voice recorder.

Respondent's signature _____
Date

Appendix 1I: Questionnaire for forensic investigators

SECTION ONE: Demographic Profile of the Respondents

1. Age

- 18-28 Years 29-39 Years 40-50 Years 51 years and above

2. Gender

- Male Female

3. Marital status

- Single Married Divorced Widowed Separated
 Other (specify)

4. Education background

- Primary: Complete Incomplete
Secondary: Complete Incomplete
College: Complete Incomplete
University Complete Incomplete
Post Graduate Complete Incomplete
Others (specify) _____

SECTION TWO: Structures

5. Are there standard procedures for conducting forensic investigations in Kenya? (If yes probe for details).
6. If No in 5, how do you conduct the investigation?
7. Which are the departments involved in forensic investigations?
8. In a single case how many officers are normally involved in the investigation?
9. Which protocols are followed when conducting an investigation?

10. What is the average time an investigation would take from first stage to final stage?
11. Are there policies which govern forensic investigations? (Probe for those policies.)
12. What is included in a forensic investigation report?

SECTION THREE: Training and practice

13. Which are the minimum qualifications for a forensic investigator?
14. Which is the basic training for practice in forensic investigation?
15. How does the training relate to the practice?
16. Which is the criterion used to select forensic investigators? (Probe for details.).
17. Do you go for in-service training in forensic investigations? (Probe for number of times.).
18. How does experience relate to service in forensic investigation? (Probe for personal experience.).
19. Are there ranks/categories for forensic investigators? (Probe for the grading of the ranks).
20. Are forensic investigators different from other officers in the service? (Probe for personal opinion and attitude.)

SECTION FOUR: Tools and technology

21. Which are the common cases in forensic investigation that you have encountered? (Probe for other cases which are not common.)
22. Which facilities are available for investigations?
23. Are the facilities adequate to deal with those crimes? (Probe for details.)
24. Which of the mentioned facilities do you commonly use? (Probe for reasons.)
25. Which technology do you commonly use? (Probe for available technology.)

26. Has there been introduction of new technology in your field of operation? (Probe for the new technology and when it was introduced.)
27. How often do you get new facilities and new technology in the field of your operation? (Probe for reasons.)
28. What happens if new technology is introduced? (Probe for case narration of what happens.)
29. In the absence of the required facilities and technology what happens? (Probe for case experiences.)
30. Please give an account of any fascinating investigation that you have performed as a forensic investigator.

SECTION FIVE: Code of conduct, ethics and human rights

31. Is there a code of conduct in forensic investigation? (Probe for details of the codes.)
32. How do these codes contribute to the practice of forensic expertise?
33. Is there a system in place to check for adherence of these codes? (Probe for the structure of the system.)
34. Do you have a working ethics in forensic investigation? (Probe for details.)
35. What are the ethical issues that arise while conducting a forensic investigation?
36. Is there a system in place to solve these issues? (Probe for ways they solve the issues.)
37. Are these ethical issues applicable to the field of forensics? (Probe for details.)
38. Do suspects have their rights while being investigated? (Probe for these rights.)
39. Do human rights issues affect forensic investigations? (Probe on how they affect.)
40. Is there a system in place to solve the human rights issues and ensure they are adhered to in forensic investigation? (Probe for the system composition.)

41. In the absence of any system, how do you solve the issue of human rights while doing the investigation?

SECTION SIX: Challenges

42. In your view, how is forensic investigation in Kenya?

43. What are the challenges that a forensic investigator encounters while on duty in Kenya?

44. Has there been any effort to solve these challenges? (Probe for the narrative of how it has been solved).

45. In your opinion, how can we address these challenges?

Appendix III: Key Informant Interview Guide

1. Which are the policies that govern forensic investigation in your field? (probe for details of the policies)
2. How effective are these policies in regulation of forensic investigation?
3. How are the policies formulated? (Probe for investigators consultation).
4. Generally, how are the policies? (Probe for their applicability and efficiency).
5. How are the experts selected for different tasks/duties in your field? (Probe for criteria and the ranking/grading).
6. Which facilities and technologies are available for forensic investigators? (probe for new technology and new facilities)
7. Are the facilities accessible to all investigators? (Probe for coverage).
8. Which are the protocols in your field of operation? (Probe for details).
9. Are there codes of conduct in your field of operation? (Probe for details).
10. Which ethical considerations are there in your field of operation?
11. How do you solve those ethical issues? (Probe for structure in place for solving them).
12. How do the issues of human rights apply in your field of operation? (Probe for effects of human rights).
13. How are issues of human rights dealt with in forensic investigation? (Probe for documentation of the details).
14. Are there formats in place for a forensic investigator to follow while on duty? (Probe for details).
15. Which are the challenges that you face as an expert in your field of operation? (Probe to get if the challenges are general to all investigators).
16. Has these challenges been solved? (Probe for ways to solve them and government involvement).
17. Are there external influences in the field of your operation? (Probe for political influence).
18. In your opinion how can challenges faced by forensic investigation be solved?

S. OF C.F.P. No.

NOTES:

.....
Scenes of Crime Officer

| Names of Suspected Persons | C.R.O.D.K.T. No. |
|----------------------------|------------------|
| | |
| | |
| | |
| | |

FOR USE OF THE FINGERPRINTS BUREAU:

SEARCHED BY: CHECKED BY:

RESULT OF SEARCH:

- 1. SEARCHED THROUGH COLLECTIONS WITH NEGATIVE RESULTS 1.
- 2. FILED OF SCENES OF CRIME FILE 2.
- 3. CHECKED WITH SUSPECT PRINTS WITH NEGATIVE RESULTS 3.
- 4. ELIMINATED 4.
- 5. FILED: INSUFFICIENT DETAIL COLLECTION 5.
- 6. CHECKED AGAINST ACCUSED(S) PRINTS WITH NEGATIVE RESULT 6.
- 7. IDENTIFIED WITH PRINTS OF BELOW NAMED PERSONS: 7.

| MARK No. | NAME AND DETAILS | SUITABLE FOR COURT | |
|----------|------------------|--------------------|----|
| | | Yes | No |
| | | | |
| | | | |
| | | | |
| | | | |

Date:

Sgd:
Principal Criminal Registrar

Appendix VI: Investigative Tools and Equipment List¹

Initial Responding Officer

“Essential”*

- Search forms/consent.
- Crime scene barricade tape.
- First-aid kit.
- Flares.
- Flashlight and extra batteries.
- Paper bags.
- Personal protective equipment (PPE).

* These items should be in police vehicles or readily available to initial responding officer(s).

Optional

- Audiotape recorder.
- Camera with flash and extra film.
- Chalk.
- Directional marker/compass.
- Disinfectant.
- Maps.
- Plastic bags.
- Pocket knife.
- Reflective vest.
- Tape measure.
- Tarps to protect evidence from the weather.
- Traffic cones
- Waterless hands wash (towelette with germicide).
- Wireless phone.

A. Crime Scene Investigator/Evidence Technician

Essential*

Bindle paper, bio-hazard bags, body fluid and collection kit.

- Camera (35 mm) with flash/film/tripod.
- Casting materials.
- Consent/search forms.
- Crime scene barricade tape.
- Cutting instruments (knives, box cutter, scalpel, and scissors).
- Directional marker/compass.
- Disinfectant
- Evidence collection containers.
- Evidence identifiers.
- Evidence seals/tape.
- First-aid kit.
- Flashlight and extra batteries.
- High-intensity lights.
- Latent print kit.
- Magnifying glass.
- Measuring devices.
- Permanent markers.
- Personal protective equipment (PPE).
- Photographic scale (ruler).
- Presumptive blood test supplies.
- Sketch paper.
- Tool kit.
- Tweezers/forceps.

* These items should be in police vehicles or readily available to initial responding officer(s).

Optional

- Audiotape recorder.
- Bloodstain pattern examination kit.

- Business cards.
- Chalk.
- Chemical enhancement supplies.
- Entomology (insect) collection kit.
- Extension cords.
- Flares.
- Forensic light source (alternate light source, UV lamp/laser, goggles).
- Generator.
- Gunshot residue kit.
- Laser trajectory kit.
- Maps.
- Marking, paint/snow wax.
- Metal detector.
- Mirror.
- Phone listing (important numbers).
- Privacy screens.
- Protrusion rod set.
- Reflective vest.
- Refrigeration or cooling unit.
- Respirators with filters.
- Roll of string.
- Rubber bands.
- Sexual assault evidence collection kit (victim and suspect).
- Shoe print lifting equipment.
- Templates (scene and human).
- Thermometer.
- Traffic cones.
- Trajectory rods.
- Video recorder.
- Wireless phone.

B. Evidence Collection Kits (Examples)

Blood Collection

- Bindle.
- Coin envelopes.
- Disposable scalpels.
- Distilled water.
- Ethanol.
- Evidence identifiers.
- Latex gloves.
- Photographic ruler (*ABFO scales*).
- Presumptive chemicals.
- Sterile gauze.
- Sterile swabs.
- Test tubes/test tube rack.

Bloodstain Pattern Documentation

- ABFO scales.
- Calculator.
- Laser pointer.
- Permanent markers.
- Protractor.
- String.
- Tape.

Excavation

- Cones/Markers.
- Evidence identifiers.
- Metal detectors.
- Paintbrushes.
- Shovels/trowels.
- Sifting screens.
- String. Weights.
- Wooden/metal stakes.

Fingerprint

- Black and white film.
- Brushes.
- Chemical enhancement supplies.
- Cyanoacrylate (super glue)
- Wand/packets.
- Flashlight.

- Forensic light source.
- Lift cards.
- Lift tape.
- Measurement scales.
- One-to-one camera
- Powders.

Impression

- Bowls/mixing containers.
- Boxes.
- Dental stone (die stone).
- Evidence identifiers.

- Measurement scales.
- Permanent markers
- Snow print wax.
- Water.

Pattern Print Lifter

- Chemical enhancement supplies.
- Electrostatic dust lifter.

- Gel lifter
- Wide format lift tape

Tool marks

- Casting materials.

Trace Evidence Collection

- Acetate sheet protectors.
- Bindle paper.
- Clear tape/adhesive lift.
- Flashlight (oblique lighting).
- Forceps/tweezers.

- Glass vials.
- Slides and slide mailers.
- Trace evidence vacuum with disposable collection filters.

Trajectory

- Calculator.
- Canned smoke.
- Dummy.
- Laser.
- Mirror.
- Protractor.
- String.
- Trajectory rods.”

Source: National Institute of Justice (2004). *Crime Scene Investigation: A Reference for Law Enforcement Training*. Washington, DC: National Institute of Justice.