

Coroners' Autopsies and Medicolegal Evidence: Have We Always Answered the Crucial Questions?

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ABSTRACT

Introduction: The coroner's autopsy is a core medicolegal service which the pathologist upon receiving an order from legal authorities undertakes in reverence and deference to the law. It is therefore a great responsibility and it is incumbent on the anatomical pathologist to attend to the questions that the law expects to be answered in a strictly professional sense. Answering the relevant and crucial questions will help the court to arrive at a veritable verdict with regard to the issues that prompted the medicolegal autopsy.

Materials and Methods: Medicolegal autopsy reports of the Department of Morbid Anatomy and Forensic Medicine, OAUTHC, Ile-Ife, Osun State over 11 years, were analyzed for documentation such as identity, cause of death, circumstances of death, resolution of conflicts, criteria for diagnoses, conclusions among others.

Results: There were 199 cases including 115 cases of accidents, 50 cases of homicides, 32 cases of natural diseases, and 2 cases of suicides. All cases were properly identified, generally poor commentaries were written in most cases and not all cases had criteria for diagnoses and medicolegal concerns considered. Differential diagnoses which were morphological inferences that could conflict diagnoses or opinions were not considered in many cases.

Conclusion: The role of the anatomical pathologist is central in the medicolegal team which investigates the issues related to deaths in suspicious circumstances. Taking cognizance of the main issues at stake and the concerns of the court would guide the pathologist to exercise due diligence in order to assist the court in a more appropriate way.

Key words: Autopsies, coroner, law court, legal concerns, medicolegal evidence

How to cite this article: Komolafe AO, Adefidipe AA, Akinyemi HA, Ogunrinde OV, Olorunsola IS, Soremekun AI, *et al.* Coroners' autopsies and medicolegal evidence: Have we always answered the crucial questions? *Niger J Health Sci* 2019;19:45-50.

INTRODUCTION

It cannot be overemphasised that the coroner's autopsy is a medicolegal service. This legally derived duty should always seek to answer the questions raised by the law by engaging medical knowledge. Failure of the pathologist to provide appropriate answers that resolve the questions raised by the court at the medicolegal autopsy session becomes an albatross and great disservice to the principles of justice delivery. The conclusions in such an autopsy would be fundamentally flawed, and it underserves the needs of law. The pathologist owes a duty to conduct such autopsies with due regard to the

questions of law. A dutiful medicolegal report should prevail over a bland medical report.

MATERIALS AND METHODOLOGY

The study was a retrospective review of the medicolegal reports of cases seen at coroner's autopsies in the jurisdiction of OAUTHC, Ile-Ife, over a period of 20 years (2005–2017). Available records of coroner's autopsies were scrutinised and analysed for documentations of the main questions that the coroner's autopsies are meant to answer, succinctly captured as the 12 Cs including:

Submitted: 23-Feb-2020 Revised: 14-Apr-2020
Accepted: 28-Jul-2020 Published: 30-May-2022

Access this article online

Quick Response Code:



Website:
www.chs-journal.com

DOI:
10.4103/njhs.njhs_11_20

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- a. *Class* of autopsy: Establishing the type of autopsy as a medicolegal autopsy
- b. *Christening* (the identity/name of the deceased): Ascertain the exact identity of the deceased and the mode used
- c. *Commentary* (a systematic chronicle of the morphological findings that form the basis for establishing the cause of death)
- d. *Criteria* (basis for opinion) for the cause of death
- e. *Course* of events (the mechanisms of death)
- f. *Circumstances* (initiating events leading to the pathophysiological alterations causing death)
- g. *Conflicts* (ruling out the differential diagnoses mimicking the case)
- h. *Concerns* (certainty of the legal concerns of the actual cause of death vis-a-vis the circumstances)
- i. *Contributions* of pre-morbid medical conditions to the acute problems precipitated by the initiating event
- j. *Cause* of death (is this clearly stated without ambiguity?)
- k. *Category* of death (what was indicated as the manner of death?)
- l. *Conclusion* (what was the final opinion inclusive of the cause and circumstances of death?).

A systematic review and thorough appraisal of the records was done in different age groups and both sexes to ascertain the presence of documentation or otherwise of the 12Cs. Cases with incomplete documentation were discountenanced.

Ethical approval for this study (Ethical Committee ERC/2020/08/13) was provided by the OAUTHC Ethics and Research Committee.

RESULTS

A total of 199 cases made up of 157 males and 42 females ranging in ages from 4 to 100 years fulfilled the inclusion criteria. These are comprised of 115 accident cases (including 105 road traffic accidents, 1 aircraft crash, 1 accidental ingestion of poison, 4 occupational accidents and 4 home accidents). There were also 50 cases of homicides including 28 firearms accidents, 13 cases of blunt trauma-related deaths, 5 sharp trauma deaths, 3 cases of strangulation and 1 case of poisoning. There were 32 cases of natural diseases including 14 deaths from cardiovascular diseases, 9 cases from gastrointestinal diseases, 1 death from respiratory infection, 1 case from musculoskeletal disease, 2 cases from urogenital disease, 1 case from metabolic disorder, 2 cases from central

Table I: The manners of death and number of cases with some variables reported at autopsy

Manner of death	Identification	Commentary	Concerns	Conflicts	Criteria
Accidents	115	28	106	3	115
Homicides	50	35	49	44	50
Natural deaths	32	20	31	0	27
Suicides	2	2	2	0	2

Table II: The manners of death and number of cases with some variables reported at autopsy

Manner of death	Circumstances	Contributions of pre-existing disease	Cause of death	Course of death mechanisms	Conclusion
Accidents	115	91	115	23	115
Homicides	50	38	50	25	50
Natural deaths	32	0	32	32	32
Suicides	2	2	2	2	2

Table III: The manners of death and overall percentage of cases with variables reported at autopsy

	Accidents (n=115; 100%), n (%)	Homicides (n=50; 100%), n (%)	Natural diseases (n=32; 100%), n (%)	Suicides (n=2; 100%), n (%)
Identification	115 (100)	50 (100)	32 (100)	2 (100)
Commentary	28 (24)	35 (70)	20 (63)	2 (100)
Criteria	115 (100)	50 (100)	27 (84)	2 (100)
Concerns	106 (92)	49 (98)	31 (97)	2 (100)
Conflicts	3 (3)	44 (88)	0	0
Contributions of pre-morbid and co-existing pathologies	91 (79)	38 (76)	0	2 (100)
Circumstances	115 (100)	50 (100)	32 (100)	2 (100)
Cause of death	115 (100)	50 (100)	32 (100)	2 (100)
Course of death mechanisms	23 (20)	25 (50)	32 (100)	2 (100)
Conclusion	115 (100)	50 (100)	32 (100)	2 (100)

Table IV: The manner of death and sex distribution of victims

Manner of death	Number of males	Number of females	Total number of cases
Accidents (<i>n</i> =115)			
Road traffic accident	81	24	105
Aircraft crash	0	1	1
Occupational accident	4	0	4
Home accident	3	1	4
Accidental poisoning	1	0	1
Homicides (<i>n</i> =50)			
Firearms	27	1	28
Blunt trauma	10	2	12
Sharp trauma	4	1	5
Strangulation	2	2	4
Poisoning	1	0	1
Natural disease (<i>n</i> =32)			
Cardiovascular diseases	10	4	14
Gastrointestinal diseases	7	2	9
Respiratory diseases	1	0	1
Musculoskeletal system	1	0	1
Urogenital system	1	1	2
Metabolic disorder	1	0	1
Central nervous system	1	1	2
Liver diseases	1	1	2
Suicides (<i>n</i> =2)			
	1	1	2

nervous system infections and 2 cases from liver disorders. In addition, there were also 2 cases of suicides. Tables I and II show the number of cases who were assessed for the parameters as listed in the objectives with regard to the manners of death. Table III shows the frequency in which the cases were reported in various categories of death. Table IV shows the manner of death and sex distribution of victims.

DISCUSSION

Our study showed that there were 156 male and 41 female deaths reported at the coroner's jurisdiction of OAUTHC, Ile-Ife. This suggests that the male sex was at a greater risk of death from unnatural and natural causes in the period studied. Males were 7 times at risk for homicidal deaths than females and at least 3 times at risk from deaths due to accidents than females. The male–female dichotomy may possibly be explained by the adventurous nature of males, a culturally imposed search for livelihood, male ego to assert dominance and the consequent associated risk of death. Findings from this study show some ambiguities and incomplete documentations of facts. In particular, commentaries were missing in a good number of cases. In addition, definitive criteria for arriving at convincing opinions of the cause of death that could be legally proven were also short for cases in the natural diseases group. Some of the autopsy reports did not address the legal questions that necessitated the autopsy requests. The reviewed reports

did not also state measures taken by the autopsy pathologists to rule out the differential diagnoses of the autopsy features that warranted the opinions on the cases. The ability of the autopsy pathologist to diligently rule out conflicting features and justify the rationale basis of his conclusion in every case is of utmost value in order to avoid doubts. Without clear-cut criteria on which diagnoses are based, the pathologist's opinion on the cause of death, circumstances which led to death and overall conclusion submitted to the court is very doubtful. Guidelines on which diagnoses are made at autopsy sessions must be explicit, and variations and modifications spelt out to accommodate pertinent non-conformities. The pathologist should give the most probable explanations of post-mortem findings within the context of the overall body of morphological evidence and the circumstances or events initiating the process and progress to death. The pathologist should not play to the gallery or follow doubtful lead without due discretion. The mechanism of death was stated in only 20% of the cases of deaths due to accidents and in only 50% of cases of homicides. There was no indication that the types of poisons were characterised by toxicological studies in the two cases reported as suspected poisoning by chemical ingestion. Failure to establish the nature of poisons in cases of suspected poisoning may prevent the possibility of explaining the pathophysiological mechanisms and clinicopathological events that culminate in death with specific poisons. Inability to establish the identity of specific poisons could weaken the relevance of medicolegal evidence and their subsequent admissibility. Anatomic pathologists should be conversant with the legal aspects of medicine, particularly the fact that the coroner's autopsy is a derivation of the law and law courts, and strive to offer the best services as the contribution of his expertise for a safe and equitable society.¹

Studies of this nature assessing the thoroughness of the pathologist's report as evidence of qualitative performance of the autopsy are uncommon, yet these core components form the basis of the examination-in-chief and cross-examination. However, there are peculiar challenges encountered by the Nigerian justice system with regard to the present state of development of the Nigerian medical practice and its readiness to assist in the resolutions of the deaths due to unnatural causes. There are very few pathologists with forensic inclination and training in Nigeria, and the Nigerian coroner's laws in most states allow general duty medical officers to perform post-mortem examination, not minding that they may not be properly trained or have the requisite basic experience. The law and the courts do not also clarify the extent of the post-mortem examination expected from the individual performing the autopsy.

Another drawback is that the Nigerian law system is inquisitorial, which essentially documents the opinion of the pathologist invited by the prosecuting team rather than being adversarial, in which the defence team may get their own pathologist as an expert witness to clarify controversies in the autopsy report. Gone are the days in which the revered

pathologist is able to railroad and intimidate the court with his credentials. There is no doubt things have changed over the years. Today's courts reject evidence based on audacious and unsubstantiated opinions, if they are devoid of verifiable scientific basis and criteria. Therefore, the pathologist should systematically and methodically observe, interpret appropriately and document morphological details in all cases with regard to the medicolegal evidence in a practical manner. These intellectual processes and strict documentations of autopsy findings that culminate in opinions of the cause of death and conclusions of postmortem examinations, constitute the aspects of the postmortem report that the defense lawyers endeavour to undermine during the cross-examination of the autopsy pathologist at the presentation of evidence. Deficiencies in the critical evaluation of every autopsy case are grounds for non-admissibility of evidence because such post-mortem examination will be regarded as incomplete and ultimately would be adjudged to be irrelevant to the case at hand. Lapses on the part of the pathologist may unwittingly convey the pathologist to the court as grossly incompetent, inexperienced and a disservice to the purpose of the court. It is therefore incumbent on the autopsy pathologist to avoid wasting vital opportunities to harness crucial evidence on medicolegal cases so as to assist in the administration of justice as well as avoiding the risk of sanctions from authorities that regulate the pathologist's professional practice.² Such deficiencies may mislead the court to make wrong verdicts because of incomplete and inadequate post-mortem medicolegal evidence.³ The United Kingdom case, *R v Sally Clark (2003) EWCA Crim 1020* succinctly portrays the potential damage of improper assessment of cases during postmortem sessions. A United Kingdom solicitor and mother was unjustly convicted and sentenced to two life imprisonments because of fundamentally flawed postmortem procedures, interpretation and reporting of the crib deaths of her two infants. The initial convictions were overturned by the Court of Appeal after the second appeal reviewed the autopsy findings and found them to be full of inconsistencies that cast aspersions on the integrity and competence of the expert witness. This judicial review also questioned the veracity of the medicolegal evidence and the technological and intellectual processes that led to the evidence.⁴ The pathologist mismanaged the findings at the procedure, discarded crucial findings in the documentation of findings and failed to convey essential finding to the court, the prosecution and defence at the initial trial, thus making way for a lopsided conclusion by the jury that weighed very strongly against the accused. The autopsy pathologist exhibited unethical and gross professional misconduct as he altered major sections of his report and changed his initial observations and opinion on the cause of death unjustifiably to significant proportions, thus raising questions about the authenticity of the initial findings and documentation.⁵ If the basis of the initial findings was verifiable and reproducible medical science, then it could not vary just at the whims and caprices of the pathologist. Such multiple errors of judgement, indecisions and poor anatomic and pathophysiological correlations

were very severe and incongruent with the experience and professional attainment. The complex nature of cases may result in wrong interpretations and disastrous conclusions such that an autopsy report may cause the court to give verdicts that may significantly alter the lives of individuals and their dependents. This study then directs a change of narrative by autopsy practitioners in the practice of autopsy pathology in Nigeria to a more consummate practice with emphasis that the coroner's autopsies uniquely stand out as a distinct form of autopsies in forensic pathology practice. The risks involved with improperly conducted autopsies are reflected by autopsy evidence used in pathology practice to assist in the adjudication of matters in the law courts.⁶

The coroner's autopsy is requested at the behest of the coroner; usually, a legal officer appointed by the government and empowered to order inquests into unnatural deaths, deaths under suspicious circumstances or when foul play is suspected.⁷ The medicolegal autopsy is still more common than the routine clinical or academic autopsy, which is unfortunately becoming a vanishing art of noble science, partly because of the over-reliance on the so-called advanced medical diagnostic technology.⁸ However, it is impossible to repudiate the role of the anatomical pathologist in diligently conducting autopsies autopsy in coroners' cases because these medicolegal autopsies are the fall-out of crime and due diligence on the part of the pathologist could unravel tangible evidence that could be vital in unravelling the identity of the criminals who are virtually bent to commit, perpetuate crime and profit eternally if possible from the gains of crime and bring them to book.⁹ Thus, the autopsy conduct in the coroner's expectations strategically sets out to answer a series of questions most important to establish the cause of death, circumstances and associated pathophysiological mechanisms and by these give clues to other antecedent events that resulted in death.^{10,11} The coroner subsequently in an overall consideration and evaluation of a body of evidences comes to a verdict.¹²⁻¹⁴ The verdict given by the coroner is a thorough synthesis of extensive dissection of facts, material and elemental exhibits including appropriate written documents and thorough evaluation of presentations of legal representations, culminating in justice that can be referenced for precedence and not mere judgement.¹⁵ The coroner's autopsy sets itself apart, as entirely different from the clinical autopsy, with specific forms well-filled, strict documentation and bound by the seal of the law.⁶ The evidence of the pathologist is also expected to be a product of professional competence, experience and due diligence in every case.¹⁶⁻¹⁸ Undocumented aspects of medical evidence are mere afterthoughts, especially if they tend to turn the tide of events in the court.^{19,20} The consent of individuals for coroner's autopsies is not necessary, an indispensable criterion in order to prevent secret homicides in the society.²¹ In many countries with advanced medicolegal investigation systems, the state also appropriately remunerates the pathologist such that he is above compromise in his duties as appropriate facilities and adequate funding are provided to duly investigate all cases to logical conclusion so as to guarantee a crime-free society.²² It

is the duty of every country to protect the rights of its citizens. Every patient is first and foremost the citizen of a state with all the benefits of human dignity before becoming a patient. Every citizen has the right to basic amenities of life which include good health and live without being intimidated. The rights to live should be respected and duly protected even after death even so when he dies prematurely.²³ The state may need an autopsy to protect this right and probably compensate the dependents. The state relies on the expertise of the pathologist in diligent conduct of the autopsy so as to guide it in protecting the rights of individual citizens within moral and legal limits.²⁴ The pathologist, being one of the most essential witnesses, serves as an expert witness in law courts and is expected to work closely with medicolegal authorities.²⁵ He is expected to be conversant with the extant laws in his practice jurisdiction. The stakeholders in the law courts such as the defence lawyers work tirelessly on technicalities to subvert and destroy medical evidence.^{26,27} The pathologist, therefore, cannot afford to be lax and allow lapses and unwarranted inconsistencies in post-mortem examinations. The law is not always common sense or public opinion or verbose demonstration of exuberant emotions but rather the presentation of logical arguments on the point of law to support the case in question. Thus, the pathologist is expected to answer some crucial questions by critically evaluating the background history or story to know the autopsy type so that he would be able to answer the essential autopsy questions so as to help the court in the proper administration of justice. The pathologist also determines the deceased's identity. He correlates detailed morphologies including the general external examination with the background history and story and establishes the circumstances of death and progressive events, the mechanisms or pathophysiological phenomena by which injuries or natural disease led to death.²⁸ An important duty of the pathologist in post-mortem examination is to systematically rule out the mimics, differential diagnoses, resolve grey areas and pre-empt the mischief of the antagonistic cross-examination aimed as subverting medical evidence.⁶ He must not gloss over the pertinent negatives.²⁹ He summarises his documentation with rational and systematic conclusion on the cause of death.³⁰ His opinion on the cause of death must be unambiguous, essentially a logical association of cause of death and circumstances of death, based on the strict application of science to evaluate evidence. To arrive at this, he critically examines tissues and traces evidence to identify the presence or absence of natural disease. He collects and interprets toxicology analyses on body tissues and fluids and determines the chemical cause of accidental overdose or deliberate poisonings.³¹ He also seeks to answer all questions raised by the death within the limits of his expertise without undue, overzealous inferences, with full allegiance to the court.²⁵ The overall diligence of the pathologist as an expert witness assists the court in formulating the manner of death and arriving at a verdict, which is quintessential justice, not a mere controversial judgement.³² Failure on the part of the pathologist to exercise due diligence in paying attention to details could lead to the miscarriage of justice which is worse if criminals are released rather being incarcerated, thus

culminating in worsening societal decadence.³³ It may also connote pathologist's incompetence or reflect a bias on the part of the pathologist making him vulnerable to disciplinary actions with loss of integrity, reputation and consequently loss of practising licence or de-registration.^{25,34} After all, a shoddy pathologist with spurious conclusions is synonymous with a corrupt judge.

The forensic autopsy and the emanating report is essentially a true story, recovered by the retrograde appraisal of science to address forensic dilemmas as things do not always seem as they appear, a classic demonstration of the philosophy of distinction, seeking to clarify issues, resolve grey areas and exterminate doubts.³⁵

This quintessential role of the medicolegal autopsy is addressing the matters crucial to the ultimate decisions on cases before the law courts. These include the precise identification of the victim, external examination of the deceased, chronicle cum commentary of the chronology of the events that led to death, highlight the mode/circumstances of death and the mechanisms involved in the process of death. Other matters of interest to the court are the pragmatic scientific resolution of conflicting differential diagnoses that may be explored to weaken the evidence, and also highlight mimics of initiating events leading to death. An astute approach to the autopsy cannot be overemphasized so as to provide credible answers to legal questions and avoid ambiguous conclusions that may pervert justice. No autopsy report can be admissible as sound medicolegal evidence in an index case without a convincing demonstration that due diligence has been exercised in the external and internal examinations.

CONCLUSION

The law court relies so much on the expertise of the anatomic pathologist in coroners' cases for the best professional opinion in order to dispense justice. Every individual deserves the right diagnosis of the cause of death, even the dead should have the most appropriate documentation of the cause of death for the records of the family and with regard to proper registration of deaths and public health surveillance. Poor analysis, interpretations and abysmal conclusions would arise from shoddy conduct of post-mortem examination, and perversion of medicolegal evidence could lead to the misleading of the court and eventually cause a miscarriage of justice. The pathologist should, therefore, exercise due diligence in every case to answer all relevant questions and resolve every controversy. Every medicolegal autopsy is unique and deserves the thoroughness of the most intriguing case and so requires that every pathologist and physician who by virtue of his appointment performs medicolegal autopsies should have considerable training in giving medical expert evidence. This is best commenced in the medical school as part of the training curriculum and particularly given more emphasis during postgraduate education. The pathologist should have a checklist to assess that all details of coroners' autopsies have been thoroughly addressed to rule out any controversies or

ambiguities, meeting the needs of the legal authorities rather than being biased to his medical specialty.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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