

PRACTICE OF FORENSIC MEDICINE – THEN AND NOW

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This article titled "Practice of Forensic Medicine - Then and now" covers a period of 33 years commencing from the year 1974 to the year 2007. The year 1974 refers to the year that I carried out my first post-mortem examination as the acting District Medical Officer of Alawwa in the Kurunegala health division. The year 2007 refers to the year of my retirement when I carried out my last of over 11,000 post-mortem examinations. During a career of over 35 years as a government medical officer of which 32 years were as a full time Judicial Medical Officer (JMO), the last 15 years as the Chief Consultant JMO Colombo.

In the year 1974, I was a preliminary grade medical officer with 12 months of service in the government. As the Medical Officer in charge of the peripheral unit Talampitiya in the Kurunegala health division, I was very often called upon by the health authorities to cover up the medico legal work at the District hospitals Polgahawela and Alawwa. On the day that I carried out my first post-mortem examination, District Medical Officer at Polgahawela and Alawwa had reported "sick". This was the system in those days whenever a murder case was reported in the district. So naturally I was served with the post-mortem order at which time I was engaged on a "shramadana" campaign in the hospital compound with my hospital staff. I could not "report sick" for obvious reasons even though I would have very much liked to have done so.

I went with the police to the "scene of murder" which was on the banks of the Ma-oya at Walakumbura bordering the

Colombo-Kurunegala main road close to Alawwa. There was a bloated decomposed body of a male lying on a "Messa", a make-shift autopsy table in village style. At that time police constables wore shorts. One such constable was carrying a shot gun possibly to prevent the body from being attacked by several "Kabaragoyas" who were roaming about the "Messa". I was also in mortal fear that the Kabaragoyas would attack me as well, during the post-mortem examination or there may be a misfire hitting me as the police constable carrying the gun appeared to be drunk and unsteady. However, I carried out the post-mortem examination and arrived at the cause of death as due to blunt cranio-cerebral trauma.

But today such a post-mortem examination would not be carried out even by a senior District Medical Officer but referred to the Provincial Judicial Medical Officer or even to the chief JMO Colombo when the provincial JMO is not available causing much inconvenience to the relatives and the police officers.

I assumed duties as the Judicial Medical Officer of General Hospital Ragama in 1975. The situation was the same as in the year 1974. No Medical Officer in the entire Gampaha health division was willing to carry out post-mortem examinations on cases of murder. Once I visited a scene where a body was hanging from a tree. The relatives and the villagers were of the belief that it was murder and post-mortem suspension. After the post-mortem examination when I expressed an initial opinion that it was a case of suicide, the people turned "hostile" and they even

destroyed the *edanda* along, which I came to the scene. I was carried over the stream by police officers on my return.

I assumed duties as an Assistant Judicial Medical Officer, Colombo in 1980. Considering my experience in field post-mortem examinations in the past, I was of the firm belief that no post-mortem examinations should ever be conducted in the field on a *Messa*

Today medical officers are advised that they should not carry out post-mortem examinations in the field. The scene of crime where a dead body is lying is today visited by a medical officer not to carry out the post-mortem examination but to observe the scene, make notes, take photographs and also to carry out basic medico-legal investigations that would help to establish the cause of death, manner of death, time of death and to collect trace material.

This new concept of visiting a *scene of death* has also received support from the Judiciary, Attorney General's department, department of the Government Analyst and the Police department. Dead bodies lying at scenes of death are today never disturbed until the arrival of the Magistrate. Dead bodies are never removed from a scene until the medical officer (DMO / JMO) makes his observations. Further, in most cases of deaths due to explosions and firearms where bodies are lying at the scene, the Government Analyst visits the scene to make his observations. In the year 2005-2006 the Government of Sri Lanka in collaboration with the Swedish police, trained doctors, state prosecutors, forensic scientists and police crime investigations with regards to the importance of a scene of crime in crime investigation.

Today the first personnel to arrive at a scene of crime where a dead body is lying are such specially trained police officers referred to as Scene Of Crime Officers (SOCO). They will preserve the scene, conduct the relevant initial investigation

until the arrival of the senior police investigators, the magistrate, the medical officer (DMO / JMO) and the forensic scientist.

Prior to the enactment of the administration of judicial law (AJL) in 1972 medical officers had to appear in person to give evidence in magistrate's court and even in coroners court, on oath. But since 1972, medico-legal reports, post-mortem examination reports, and other reports submitted by medical officer to courts of law are accepted. However even up to the present day the medical officer must attend high courts to give evidence in cases of murder, attempted murder, sexual offences and similar crimes.

The AJL of 1972 also resulted in the abolition of non summary trials in cases of murder, attempted murder, sexual offences and other grave crimes. The accused in the above mentioned cases were indicted directly in the high court. This only short circuited trials but did not bring justice to the accused. As a result of which the code of Criminal Procedure Act of 1979 reintroduced non-summary inquiries in respect of the crimes mentioned above.

When I first began to attend high courts, all trials were jury trials. Such jury trials were most interesting. It was interesting to see as to how the seven jurors were empanelled at times with objections from the defence counsel and the prosecuting counsel. The presiding judge's initial address to the jury on the concepts of law such as *'You are the sole judges of facts'*, *'Proof beyond reasonable doubt'*, *'Innocent until proven guilty by your verdict'*, *'You are however duty bound to adhere to the legal directions given by me in analyzing evidence and coming to a verdict'*, still ring in my ears even after my retirement. This was followed by the opening address of the state prosecutor. Such jury trials continued from day to day. The trial concludes with the final addresses to the jury by the prosecuting counsel, defence counsel and finally by the presiding judge. The

crowning moment of a jury trial was the verdict given by the foreman of the jury as to whether the accused was guilty or not guilty. Wild scenes follow after the verdict of õguiltyö.

Today we hardly hear of any jury trials. I wonder whether lawyers defending accused in criminal cases have ever explained to them the legal standards required to prove their guilt. Such non jury trials take months or even years to be conducted by which time most often the principle witnesses are dead or the accused persons are dead. To avoid such long delays in the conclusion of trials which often leads to a miscarriage of justice, the Attorney Generals department in consultation with the judiciary introduced the concept of õTrial-at-Barö in cases of grave crime which includes murder. Such trials are held before their judges of the high court on a day to day basis and a verdict given without delay. The first of such trials in which I gave evidence was the case of torture and murder of Attorney-at-Law Wijedasa Liyanarachchi in the year 1986 while in police custody. This was followed by the case of rape and murder of school girl Krishanthi Kumaraswami and the murder of her mother, brother and neighbour all by õstrangulationö in the year 1996 at the hands of army personnel at a check point in Jaffna. The last of my such cases where I gave evidence at a õtrial-at-bar- was the murder of the high court Judge, Mr. Sarath Ambepitiya in the year 2004 by drug agents. In the latter two trials all accused were found guilty and sentenced to death.

Up to the year 1979, inquest into deaths such as suicides, fatal road traffic accidents, all other forms of accidental deaths, homicides, deaths in police custody, prisons and mental hospitals were conducted by inquirers into sudden deaths, most of whom were political appointees even without basic education. Yet they held õinquestsö even into the most complicated murder cases and even gave verdicts. Thanks to the enactment of the Code of Criminal Procedure Act of 1979, all cases of murder,

suspicious deaths, deaths in police custody, prisons and mental hospitals etc. must necessarily be inquired into by a Magistrate.

In 1975, the year I took forensic medicine as a career, most of the medico-legal work in the country was carried out by district medical officers. They had no special training and knowledge in the field. But yet their evidence was sufficient to sentence an accused to death. Even in the year 1992 when I assumed duties as the chief JMO, Colombo there were only four consultants in the health department. However I am proud to state that when I retired as the Chief JMO, Colombo in the year 2007, there were nearly 50 consultants in the field of forensic medicine.

In the year 1980 when I assumed duties as an assistant JMO, Colombo, I had with me only the 1949 edition of the text book of forensic medicine authored by Sir Sydney Smith. But since then several text books are available. These includes texts by Keith Simpson, Bernard Knight, Keith Mant, Eckert, DiMaio & Diamio, Adelson, Gradwhol, Polson, Gee, Mason, Mclay etc. almost all of whom were professors and world renowned figures in forensic medicine. The earliest text book in forensic medicine in Sri Lanka was published by Prof. N. Saravanapavanandan in the year 1982 titled õMedico-legal aspects of injuriesö. This was followed by text books by Prof. Niriellage Chandrasiri (Ruhuna) and Prof. C.J. Babapulle (Peradeniya). The writer (Dr. L.B.L. de Alwis) has already published two texts titled õMedico-legal aspects of injuriesö (Vol. I) and õForensic Pathology and Scienceö (Vol. II). Two more texts by the writer titled õForensic Toxicologyö (Vol. III) and õMedical ethics and Forensic Psychiatryö (Vol. IV) will be published soon.

In the year 1995 the University of Colombo commenced a course in forensic medicine for lawyers leading to the Diploma in Forensic Medicine and Science. It is conducted even today. The number of

diplomates are around 112. In the year 2009, the University of Peradeniya commenced a similar course for lawyers and judges. Such courses in forensic medicine have been very useful to judges, state prosecutors and criminal lawyers to understand medical reports and medical evidence. This has indirectly resulted in an awareness among medical officers to upgrade their medico legal knowledge.

Most of the murders up to the year 1985 were by the use of blunt weapons such as clubs / iron rods or cutting weapons such as swords / knives. Firearms used were invariably shot guns or *galkattas*. The bombs used were locally made hand bombs referred to as *duppies*. In the year 1986, the first *terrorist bomb* exploded outside the north and east in a plane about to take off to Male from the Katunayake Airport killing amongst others, 14 tourists. Thereafter *terrorist bombs* exploded all over but mainly in and around Colombo killing tens and hundreds of innocent civilians. In 1987, the Pettah Central bus stand explosion killed over 115 civilians, the largest number of civilians killed in a single blast. In January 1996, a blast occurred at the Central Bank, Colombo killing over 90 civilians which included several bank employees and customers.

In 1993, the President of Sri Lanka was killed in a blast, while in 1994, a presidential candidate along with several top politicians of the party he represented were killed by a suicide blast. Over the years such suicide bombers have killed several politicians, including cabinet ministers and security personnel outside the war-zone. In the war-zone, several thousands have been killed on both sides. This massacre of *Innocents* continued till May 2009 when the *terrorist* organization responsible for such murders was decimated by the Sri Lankan security forces.

The initial *terrorist* bombs were parcel bombs like the Air Lanka, CTO blasts etc. Over the years there was a progressive

evolution of the type of terrorist bombs. Hand carts, pedal cycles, motorcycles, cars, vans, tractors and lorries were used much later. Finally was the human bomb referred to as the *suicide bomber* was developed where females predominate over males. However this was not the end, for last of the terrorist bombs was the use of a *home-made aircraft* loaded with explosives manned by a suicide cadre. This crashed into the Inland Revenue department building in early 2009 missing its target, which was the Air-force headquarters situated across the road.

The gun-culture was limited to shot guns and *galkattas* (sawed off shot guns) with the occasional use of pistols and revolvers. But in years 1988-1989, southern insurgents were using T-56 rifled weapons to gun down and kill in broad day light politicians, their supporters, public servants, academics, businessmen and innocent civilians who opposed their political ideology. The government of the day retaliated even more strongly using similar weapons to crush the southern insurgency. At the height of the southern and northern insurgencies, several charred human remains were found almost everywhere. Almost all such *burnt / charred* bodies were referred to me as the Chief JMO, Colombo. Post-mortem examinations conducted by me revealed that almost all of them had been shot dead on the head and the bodies burned thereafter.

Sri Lanka has also had a fair share of major mass-disasters due to aircraft accidents. The first notable crash occurred in December 1974, when a Martin Air DC 8 aircraft chartered by Garuda Indonesian Airways carrying 182 Haj pilgrims crashed into the 5th Mountain in the seven virgins mountain range at Maskeliya killing all passengers and crew. Again, in the year 1979 Caledonian Airways carrying nearly 200 Haj pilgrims crashed at Kimbulapitiya amidst a coconut estate when trying to land at the Colombo International Airport killing all passengers and crew. In these two major disasters none of the dead were

identified. The causes for their deaths were never established and even the cause for the disaster was not scientifically identified according to the International Civil Aviation Organization (ICAO 1970). It was the Tsunami disaster in December 2004 killing 30-40,000 Sri Lankans and many tourists that paved the way for the establishment of a Disaster Victim Identification (DVI) programme for Sri Lanka with assistance, mainly from the European Union and Great Britain. This DVI programme has been in operation in Sri Lanka since then in the identification of armed forces and innocent civilians who have been victims of terrorist bombs / attacks since then.

From time immemorial, post mortem examinations were conducted by a single medical officer. His reports and evidence were the only evidence before a court trial. However the presence of a 2nd medical officer as an observer during a post-mortem examination first arose in the year 1986 when the Bar Association of Sri Lanka requested the Magistrate who held the inquest into the death of Wijedasa Liyanarachchi, an Attorney-at-law who died in police custody. This post-mortem examination was in fact conducted by me as the Deputy consultant JMO, Colombo. All what the observer did was to get a copy of my full report and submit it to the authorities who appointed him as the observer as if it were his own report. This was the first and the last time that I allowed an observer to be present at a post-mortem examination conducted by me or any of my assistants at the mortuary of the JMO, Colombo. At the beginning of my article I referred to my last post-mortem examination during 2007, the year of my retirement. The body was that of a Maldivian national, a dissident of the then Maldivian president, whose dead body was found floating in the sea after arrest by Maldivian police. So naturally the opposition to the Maldivian president alleged torture and murder and disposal at sea. The body was referred to me as the Chief JMO, Colombo for the post-mortem

examination. The opposition wanted an observer to be present at the post-mortem examination. The observer named was the same person who appeared as the observer in the 1986 death in custody of the Attorney-at-law. I rejected the request for the presence of an observer and carried out the post-mortem examination with the additional JMO, Colombo and gave a conclusive report that there were no evidence of torture or death by physical violence and that the death was due to drowning.

A unique situation arose in December 2003 when a highly respected Sri Lankan Buddhist priest died during a visit to Russia to be conferred a degree. It was alleged that the death was due to a Christian conspiracy. The body was brought to Sri Lanka and the post-mortem examination was conducted in the presence of the four most senior forensic pathologists in the country along with a consultant cardiologist. The report given by the panel on the same day concluded positively that the death was due to Ischaemic Heart Disease. This helped to diffuse what would have been otherwise an explosive situation possibly leading to religious riots.

In the past almost all forensic science investigations pertaining to post-mortem examinations were carried out by the Department of the Government Analyst in Colombo. This has resulted in very long delays in obtaining reports from the Government Analyst. Today however there are provincial sub-units of the Government Analyst department somewhat minimizing delays in obtaining reports. Furthermore, many forensic science investigations are carried out by the medico-legal laboratory of the JMO Office, Colombo. These include basic toxicology, alcohol estimations, serology, biochemistry and diatom studies to name a few.

Histopathological studies were little heard of in the past. But since the year 2000 all consultant JMOs carry out their own

histopathological studies in determining the causes of death and express opinions relating to the death. As a result of which, our forensic pathological services are almost on par, with the rest of the countries in the region.

The most singular forensic science investigation of the present time is the DNA studies. Such DNA technology has helped in the conviction of murderers in the Hokandara murders where five persons of the same family were killed and all young females sexually abused. DNA technology was also useful in identification of the assailant of High Court Judge Mr. Sarath Ambepitiya. But sadly there is no forensic DNA laboratory in Sri Lanka. Studies are carried out by a private laboratory (Genetec) and the Department of Molecular biology of the Kelaniya University.

Until recently medical officers hardly took any photographs at scenes of crime, during autopsies or clinical examinations. Often a police photographer would take a few shots at the scene. But today most medical officers carrying out medico-legal work have their own digital cameras which are used at scenes of crime, during post-mortem examinations and clinical medico-legal examinations. In addition, the police department also uses video recording of scenes of murders and various stages of the post-mortem examinations. This has resulted a new concept of photographic evidence.

X-ray investigations in the past were only for the living. But in the year 1990, X-ray facilities were made available to the mortuary of the office of the JMO, Colombo. Today such X-ray facilities are available indirectly to all mortuaries of Teaching hospitals and provincial general hospitals. These X-ray facilities have been very useful in cases of fatal child abuse, firearm victims, charred bodies etc. Infact, such X-ray evidence has been more useful than the oral evidence of medical officers

who conducted the post-mortem examinations.

The instalment of mortuary coolers is again something good for the future. The first time that I ever saw a mortuary cooler was in the year 1980 when I assumed duties as AJMO/Colombo. But since then several other teaching hospitals, general hospitals, and many other district hospitals and even other hospitals carrying out medico-legal work are provided with mortuary coolers. But sadly, most of these coolers malfunction as they are not maintained by the health authorities.

What I have mentioned above are some of the major advances and achievements in forensic medicine over the past 3 decades. But there are also areas of decline over the same period. I remember the early period of my career as a JMO, when I appeared in court to give evidence. At that time there were special seats for medical officers in the well of the court to the left and close to the judge's rostrum. Today there are no such seats. Even as the Chief consultant JMO, Colombo I often stood at the entrance door of the court for want of a chair, for several hours waiting for my case to be called and walk away disappointed when the case is postponed. In the good old days the moment the judge spots a doctor in the well of the court, his/her case is called and evidence recorded without delay or postponed promptly if either prosecutor or the defence was not ready for trial.

All what I have written above as the retired Chief Consultant JMO, Colombo are in the best interest of the medical profession, legal profession, the judiciary and all other institutions responsible for the proper administration of justice in Sri Lanka. This was infact my Dream goal during my career as a Judicial Medical Officer for over 3 decades.