

HISTORY OF FORENSIC MEDICINE

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Introduction

Forensic medicine, legal medicine, and forensic pathology are terms that have been used interchangeably around the world. It now seems appropriate to use the terms forensic medicine and legal medicine together to indicate all branches of medicine and related specialties, that interact with legal processes, either directly or indirectly. The actual usage of the terms may vary from country to country. Forensic medicine can be divided into forensic pathology, which investigates unnatural, unexpected, or violent death, and clinical forensic medicine (a term that has become widely used only in the last two decades), which is used to refer to that branch of medicine which involves an interaction between the living person, medicine, and legal processes. In broad terms a forensic pathologist does not (in general) deal with living individuals, whereas a forensic physician does not deal with the deceased. There are many medical practitioners who are involved in both

clinical and pathological aspects of forensic medicine. Many practitioners have qualifications or training in medicine, law, and forensic science. There are many areas where both clinical and pathological aspects of forensic medicine overlap, and this is reflected in the history and development of the specialty as a whole.

The term forensic pathologist is used generally to describe those pathologists who undertake autopsies performed on the instructions and request of legal bodies responsible for the investigation of sudden, suspicious, obscure, unnatural, litigious, or criminal deaths. The legal bodies that may make these requests may be agents of the state, the judiciary, the police, lawyers representing those arrested for murder, those involved in legal action, health and safety organizations, and many other possible sources. The forensic pathologist undertakes the examinations to assist and advise the state or other investigating agencies in the interpretation of the findings and to recommend further relevant investigation. The practitioners of clinical forensic medicine have been given many different names over the years, but the term forensic physician has now become accepted. Other names that have been used include police surgeon, forensic medical officer, and forensic medical examiner. The extent

and range of the role of a forensic physician is variable – many may limit themselves to specific aspects of clinical forensic medicine – for example, sexual assault or child abuse. **Table 1** illustrates those cases in which the expertise of a forensic physician may be required. Some practitioners of clinical forensic medicine may only perform part of these functions, whilst others may have a more extensive role, which may be dependent on geographical location and local statute. Part of a forensic pathologist and forensic physician's remit must be to have a good knowledge of “medical jurisprudence” – the application of medical science and related specialties to the law. The function and role of forensic pathologists and forensic physicians can differ widely or overlap, depending on local judicial systems or statute, and in many cases result in the need for a special understanding of medical law and medical ethics.

The origins of forensic and legal medicine go back many centuries although the terms forensic medicine and medical jurisprudence date back to the earliest part of the nineteenth century. In 1840 Thomas Stuart Traill pointed out that “it is known in Germany, the country in which it took its rise, by

the name of State Medicine, in Italy and France it is termed Legal Medicine; and with us it is usually denominated Medical Jurisprudence or Forensic Medicine.”

In China, pharmacology and pharmacognosy were written about from 3000 BC. In 1975 Chinese archeologists discovered a number of bamboo pieces that had information on the rules and regulations for examining injuries – these dated from about 220 BC. The Hammurabi Code (named after the king of Babylon – now in modern Iraq), dated back to about 2200 BC and dealt specifically with the rights and duties of physicians, including medical malpractice. Penalties ranged from cutting off the hands of the offending physician to monetary compensation.

The laws of Manu (India) date back to around 10 BC and dealt with issues still particularly relevant today, including the competence of witnesses in courts. In Egypt, laws regulated the medical profession and physicians had to follow strictly the methods used by ancient physicians. Stab wounds were categorized and closed head injuries with skull fractures described. Papyri related to Roman Egypt dating from the latter part of the first to the latter part of the fourth century AD contain information about

Table 1 Possible roles of a forensic physician^a

Role

- Determination of fitness to be detained in custody
- Determination of fitness to be charged: competent to understand charge
- Determination of fitness to be interviewed by the police or detaining body
- Advise that an independent person is required to insure rights for the vulnerable or mentally disordered
- Assessment of alcohol and drug intoxication and withdrawal
- Comprehensive examination to assess a person's ability to drive a motor vehicle, in general medical terms and related to alcohol and drug misuse
- Undertake intimate body searches for drugs
- Documentation and interpretation of injuries
- Take and advise on appropriate forensic samples
- Assess and treat personnel injured whilst on duty (e.g., police personnel) including needlestick injuries
- Pronounce life extinct at a scene of death and undertake preliminary advisory role
- Undertake mental state examinations
- Examine adult complainants of serious sexual assault and the alleged perpetrators
- Examine alleged child victims of neglect, physical, or sexual abuse
- Examine victims and assailants in alleged police assaults
- Give expert opinion in courts and tribunals
- Investigation of deaths in custody
- Pressure group and independent investigators in ethical and moral issues: victims of torture, war crimes, female genital mutilation
- Refugee medicine (medical and forensic issues)
- Asylum-seeker medicine (medical and forensic issues)
- Implement principles of immediate management in biological or chemical incidents

^aThis table illustrates the role of forensic physicians in the UK; roles vary according to geographical location.

For all these examinations a forensic physician must accurately document findings and when needed produce these as written reports for appropriate civil, criminal, or other agencies and courts. The forensic physician will be also able to present the information orally to a court or other tribunal or forum.

forensic medical examination or investigation. In Persia (now Iran), there was an official scale of medical fees and a restriction of medical practices to certain castes and classes of the community, and penalties were meted out for medical malpractice. Injuries were subdivided into several groups; abortion was a serious crime.

Amundsen and Ferngren have assessed the evidence for the role of physicians as expert witnesses in classical Greece and concluded that forensic medicine was used by Athenian courts and other public bodies and that the testimony of physicians in matters of a medical nature was given particular credence. In the Roman Republic the *Lex Duodecim Tabularum* (449 BC) made minor reference to medicolegal matters including length of gestation (to determine legitimacy), disposal of the dead, punishments dependent on the degree of injury caused by an assailant, and poisoning. The *Lex Aquilia* of 572 BC dealt with the lethality of wounds. The “*novus actus interveniens*” in relation to deaths from wounds was brought into play and declared as a break in causation. Sulla’s “*Lex Cornelia*” (138–78 BC) declared that a physician should be exiled or executed if it was established that he had caused the death of his patient. The body of Julius Caesar (100–44 BC) after his murder in the forum was examined by the physician Antistius who declared that there were 23 stab wounds, only one of which was a fatal wound. The Emperor Justinian (AD 483–565) in his “*Digest*” recorded that “physicians are not ordinary witnesses, but give judgment rather than testimony.”

Between the fifth and the tenth centuries, the so-called Dark Ages, the “*Leges Barbarorum*” of the Goths, Visigoths, and Vandals laid down clearly when medical experts were called for. “*Wergeld*” (blood money) was payable to the victim or on death to relatives of the decedent by the perpetrator – and these principles apply in certain cultures today. The first Holy Roman Emperor, Charlemagne (742–814) had his bishops produce the “*Capitularies*” in which the need for expert medical testimony was required in wounding, abortion, rape, incest, infanticide, and suicide.

In 1209, the influence of the Church was formalized by Pope Innocent III with the appointment of physicians to the courts. In 1234 Gregory IX in his “*Compilatio Decretalium*” collected all decisions and edicts in relation to medicolegal matters and these held sway in France until 1677.

Traill stated that “*Medical Jurisprudence as a science cannot date farther back than the 16th century*” and identified George, Bishop of Bamberg

who proclaimed a penal code in 1507, as the originator of the first examples of codes where medical evidence was a necessity in certain cases. However, it was the *Constitutio Criminalis Carolina* – the code of law published and proclaimed in 1553 in Germany by Emperor Charles V – that originated legal medicine as a specialty. Within these codes of 1553, expert medical testimony became a requirement rather than an option to give opinions in cases of murder, wounding, poisoning, hanging, drowning, infanticide, and abortion. In 1575, the military surgeon Ambrose Paré produced his book on medicolegal reports; he also wrote about deaths from lightning, antemortem versus postmortem injuries, and poisoning by carbon monoxide and corrosives.

In 1595 Andreas Libavius produced his medico-legal text in which he specifically describes cruentation, the phenomenon in which blood flowed from a decedent’s wounds if he were to be touched by the murderer postmortem. James VI of Scotland subscribed to this practice in his book “*Daemonologie*.” In that year the text “*Methods Testificandi*” was published by Codronchius, a physician from Imola, and in the following year Fortunatus Fidelis published “*De Relationibus Medicorum*” from Palermo. The French physician, Séverin Pineau wrote his book on defloration and virginity, and he discussed at some length the existence of the hymen. Paulus Zacchias (1584–1659), principal physician to the popes Innocent X and Alexander VII, expert before the “*Sacra Romana Rota*” (the highest papal court of Appeal) published the major seven-book series “*Quaestiones Medico-legales*.” He is still hailed as the father of legal medicine.

Certainly medicolegal autopsies were well documented in parts of Italy and Germany five centuries before the use of such procedures by English coroners. The use of such expertise was not limited to deaths or to Europe. Cassar describes the earliest recorded “*Maltese medicolegal report*” from 1542, in which medical evidence established that the male partner was incapable of sexual intercourse and this resulted in a marriage annulment.

These historical references of medical expertise being used in the context of law prior to the eighteenth and nineteenth centuries confirm the longstanding need and status of forensic or legal medicine in many jurisdictions.

A number of books and treatises were published in the English language in the eighteenth century concerning forensic medicine and medical jurisprudence. What is remarkable is that the issues addressed by many of the authors are ones that

would not be out of place in a contemporary setting. It seems odd that many of these principles are restated today as though new. In the course of the next two centuries, several medicolegal texts appeared in Germany and France; chairs of medical jurisprudence were installed in Paris, Strasbourg, and Montpellier with such major authorities as Mahon and later Orfila and Tardieu in Paris, Chaussier in Dijon, Foderé in Strasbourg, Johann Ludwig Casper in Berlin, and Eduard Ritter von Hofmann in Vienna.

In 1783 William Hunter published essays related to the findings in murder of bastard children, and this may be the first true “forensic medicine” publication from England. The first larger work (*Elements of Medical Jurisprudence*) was published in 1788 by Samuel Farr, itself translated from 1767 Fazellius of Geneva’s publication *Elemental Medicinae Forensis*. Davis refers to these and to *Remarks on Medical Jurisprudence* by William Dease of Dublin, and OW Bartley of Bristol’s *Treatise on Forensic Medicine or Medical Jurisprudence*. Both these Davis considers of poor quality and he makes the statement that the “first original and satisfactory work” was George Male’s *Epitome of Juridical or Forensic Medicine*, published in 1816. A second edition was published in 1821. Male was a physician at Birmingham General Hospital and may be considered the father of English medical jurisprudence. However, the first course of lectures to medical students on legal medicine were given in Britain by Andrew Duncan (senior), then Professor of Physiology in Edinburgh, in 1789. These were published in 1792 as the *Heads of Lectures on Medical Jurisprudence or the Institutiones Medicinae Legalis*. Duncan’s eldest son occupied the first chair of medical jurisprudence and medical police created by central government as a Regius Chair with royal patronage in 1807. Chairs were later established in Glasgow (1839) – Robert Cowan, and in Aberdeen (1857) – Francis Ogston. In England the first professor was John Gordon Smith (1773–1832) and later George Edward Male (1779–1845). Others followed later in the London medical schools. In 1856 a course in medical jurisprudence was an essential prerequisite for admission to the Faculty of Advocates in Edinburgh.

In 1813 in New York, Benjamin Rush (1745–1813), another Edinburgh medical graduate and a signatory of the Declaration of Independence, wrote on medical jurisprudence. In 1804, an Edinburgh-trained physician, JA Stringham (1775–1813), was appointed as a lecturer in medical jurisprudence at the College of Physicians and Surgeons of New York and was appointed to a Chair in 1813.

Texts on forensic medicine began to appear more rapidly with much broader content. John Gordon Smith in his book *The Principles of Forensic Medicine Systematically Arranged and Applied to British Practice*, published in 1821, stated that “Forensic Medicine – Legal, Judiciary, or Juridical Medicine – and Medical Jurisprudence are synonymous terms.” **Figure 1** reproduces the forms from his book used to document information about neonatal deaths and stillborn babies. Smith refers in his Preface to the earlier books and notes: “It is but justice to mention that the American schools have outstripped us in attention to Forensic Medicine” – and he may have been referring to the work of Theodric Romeyn Beck and others. TR Beck and his brother JB Beck (both pupils of Stringham) became leaders in their field by their publications and lecturing. TR Beck published the first American textbook 2 years later.

John Gordon Smith wrote:

Every medical practitioner being liable to a subpoena, should make it his business to know the relations of physiological and pathological principles to the facts on which he is likely to be interrogated, and likewise the principal judiciary bearings of the case. The former of these are to be found in works on Forensic Medicine; the latter in those on Jurisprudence. Alfred Taylor in his book *A Manual of Medical Jurisprudence* defined medical jurisprudence as “that science, which teaches the application of every branch of medical knowledge to the purpose of the law.”

There was a clear demand for such books, and Traill’s *Outlines of a Course of Lectures on Medical Jurisprudence* (published in 1840 when he was Regius Professor of Jurisprudence and Medical Police at Edinburgh) was the second edition of a book initially published in 1834. It was in Edinburgh in 1807 where the first Chair of Forensic Medicine was established in the UK, with subsequent nonprofessorial academic forensic medicine posts at Guy’s Hospital and Charing Cross Hospital, London. In 1839 and 1875 respectively academic chairs of medical jurisprudence were created in Glasgow and Aberdeen.

The relevant areas of interest to forensic medicine and medical jurisprudence were gradually becoming better defined. **Table 2** summarizes the chapter contents of John Gordon Smith’s 1821 text. It will be noted that almost two centuries ago much of the content is completely recognizable and relevant to forensic physicians and forensic pathologists even today. So by the end of the nineteenth century, in Europe, the UK, and America and those related jurisdictions a framework of forensic medicine was established that persists today.

FORMS, referred to at Page 340.

A. *Statement of the Examination of* *new-born Children, who died AFTER RESPIRATION.*

Sex of the Subject.	Period of Gestation when born.	Duration of Life, after Birth.	State and Appearance of the Subject.	Weight of the whole Body.	Colour of the Lungs in situ.	Relative Situation of the Lungs as to the Pericardium.	Weight of the Lungs alone.	Their State as to Buoyancy in Water while entire.	The same when divided.	Miscellaneous Remarks *.

B. *Statement of the Examination of* *STILL-BORN Children.*

Sex.	Period of Gestation.	General State, &c.	Weight of the Body.	Colour of the Lungs in situ.	Relative Situation.	Weight of the Lungs.	Their State in Water when entire.	The same when divided.	Miscellaneous Remarks *.

* In this column should be recorded the state of the lungs when cut into, as to the crepitus or absence of it, and also as to hæmorrhage—with any other observations that may be furnished by peculiar cases. The result of a few such cases, accurately recorded by a number of practitioners, would be acceptable to the profession.

Figure 1 Copies of forms used in John Gordon Smith's 1821 text *The Principles of Forensic Medicine Systematically Arranged and Applied to British Practice*, concerning neonatal deaths and stillborn children. Reproduced from Smith JG (1821) *The Principles of Forensic Medicine Systematically Arranged*. London, UK: Thomas and George Underwood.

Contemporary Forensic Pathology

Forensic pathology is practiced by those in general with a background in histopathology or anatomical pathology. The forensic pathologist's work is directed to assisting in predominantly judicial or legal processes by establishing manner, time, and cause of death. Their pathological skills must be supported by an ability to integrate the medical aspects of the workload with toxicological, scientific, and legal issues. Forensic pathologists are assigned a variety of names around the world, for example, legal medicine specialists, medical examiners – but all are primarily involved in the investigation of death – by the

use of autopsy and associated procedures. Forensic pathologists may work in academic departments, state or government institutions, or independently. It is to be expected that their work and the reporting of their work is and is seen to be independent of any body or organization, whether police or governmental, and free from political interference. A forensic pathologist may be expected to have special knowledge in the following areas: anatomy, cytopathology, hematology, microbiology, immunology, chemical pathology, and toxicology. Many forensic pathologists around the world will also have special relationships with public health, occupational health, and community health issues, reflecting for some, the

Table 2 Sample chapter contents of John Gordon Smith's 1821 text *The Principles of Forensic Medicine Systematically Arranged and Applied to British Practice*

Of sudden death in the healthy state
<ul style="list-style-type: none"> ● The phenomena of death ● States of the living body resembling death ● Tests of the reality of death ● Sudden death without cause of crimination ● Sudden death from intrinsic or morbid causes
Death by personal agency or homicide
<ul style="list-style-type: none"> ● Mineral poisons ● Vegetable poisons ● Occult poisoning ● Suffocation ● Drowning ● Hanging ● Smothering
Death by spontaneous agency or suicide
Infanticide
Questions arising from injuries done to the person not leading to the extinction of life
<ul style="list-style-type: none"> ● Mutilation ● Rape
Disqualifications for the discharge of social or civil functions
<ul style="list-style-type: none"> ● Mental disqualification ● Mania
Sexual identity
Personal identity

historical origins of the workload. Many forensic pathologists will also have workloads relating to the clinical aspects of forensic medicine.

Contemporary Clinical Forensic Medicine

It is only in the last two decades that research and academic interest in clinical forensic medicine has become an area of much more focused interest and research. A working definition has been suggested as: "clinical forensic medicine includes all medical (healthcare) fields which may relate to legal, judicial, and police systems." In part this increased relevance relates to much wider awareness of human rights abuses and civil liberties which in turn have directed much attention to the conditions of detention of prisoners, and to the application of justice to both victim and suspect. The differing and potentially conflicting roles that a forensic physician may have when attending a prisoner or other person detained by the state or other body have been recognized by identifying three possible facets of medical care: (1) the role of medico-legal expert for a law enforcement agency, (2) the role of a treating doctor, and (3) the examination and treatment of detainees who allege that they have been mistreated by the police during their arrest,

during interrogation, or during the various stages of police custody. This conflict is well recognized by forensic physicians.

Table 3 is a summary of responses to a questionnaire on various aspects of clinical forensic medicine undertaken in late 2002/early 2003. It shows with clarity the range of different standards and procedures in a number of the most important aspects of forensic medicine and may be summarized as follows.

- A wide variety of differing patterns of clinical forensic medicine practice may be seen on an international basis – but there appears to be recognition of the need to have appropriate personnel to undertake the roles required.
- Informal/*ad hoc* arrangements to deal with medical and forensic care of detainees and victims appears to be common – often with large centers having physicians specially trained or appointed whilst rural or outlying areas are reliant on nonspecialists.
- In several countries the emphasis of care and assessment appears to be the examination and assessment of the alleged victim rather than the alleged suspect rather than there being an equality of approach – this potentially compromises justice.
- The standard of medical care of detainees in police custody is variable – although there appears to be more recognition of the human rights aspects of care of those in police custody.
- There are no international standards of practice or training – international standards are still lacking, but more countries appear to be developing national standards.
- There are apparent gaps in the investigation of police complaints in some countries – this remains the case.
- Statistics of deaths in custody are not always in the public domain – this remains the case – and the investigation of deaths in police custody may still not be independently undertaken.

Summary

Forensic medicine arises from a long tradition of links between the law and medicine and now embraces a wide variety of needs and skills intertwining medicine, pathology, science, the law, and ethics. Each practitioner, whether clinical, pathological, or both, should be aware of their responsibilities, not only to their patient or the deceased, but to society as whole, and be able to utilize their medical expertise in the pursuit of fairness and justice within the framework of legal requirements and ethical values.

Table 3 Responses to a questionnaire addressing various aspects of custody medicine around the world – 2003

Question	Australia	England & Wales	Germany
Is there a formal system in your country (or state) by which the police and judicial system can get immediate access to medical and/or forensic assessment of individuals detained in police custody (prisoners)?	Yes (within the state) Two tiered system addressing general health issues and forensic medical services	Yes. Forensic physicians (forensic medical examiners) are contracted (but not generally employed) by both police and courts to undertake this. The Police & Criminal Evidence Act 1984 made particular provision for this and for prisoners to request to see a doctor. Police surgeons do not necessarily have specific forensic training or qualifications	Yes – only after a court order has been granted
Who examines or assesses individuals detained in police custody to determine whether they are medically fit to stay in police custody?	Nurses or medical practitioners who are employed or retained by police.	Forensic physicians, Police and Criminal Evidence Act 1984. Recent changes to PACE Codes of Practice suggest that an appropriate 'healthcare professional' may be called.	Normally a police surgeon but if not any qualified doctor.
If a prisoner is suspected of being under the influence of drugs or alcohol in police custody, is it usual for them to be examined by a doctor (or other healthcare professional) to determine whether they are fit to remain in custody?	Yes, but it will be largely dependent on any health concerns. (e.g abusive, intoxicated person - unlikely to access medical attention, but impaired conscious state - always access medical attention)	Yes, if there are associated health concerns, or if there is a specific need to determine fitness to interview when either intoxication or withdrawal may render an interview invalid. Specific guidelines are published on care of substance misuse detainees in police custody	Yes
Does your country/state have specific codes/laws/statutes or regulations that make provision for the welfare of individuals in police custody?	Yes	Yes	Yes
Who undertakes the forensic medical examination and assessment of alleged victims of sexual assault?	Forensic Medical Officers	Forensic physicians or sexual offence examiners or doctors employed within specialist sexual offences units	Either a gynaecologist or a medicolegal doctor
Who undertakes the forensic medical examination and assessment of alleged perpetrators of sexual assault?	Forensic Medical Officers	Forensic physicians	Medicolegal doctor

<i>Hong Kong</i>	<i>India</i>	<i>Israel</i>	<i>Malaysia</i>
Yes. The formal and generic mechanism is for the individual to be taken to an Emergency Department of a nearby hospital. Rarely they may be sent for a specific purpose to a specialist forensic doctor	Yes. Under a Section of the Criminal Procedure Code (Cr. P.C.), a police officer can immediately bring an arrested person to a doctor for examination. If the arrested person is a female, only a female registered medical practitioner can examine her. The accused/detained person can himself contact the doctor and have himself examined.	Yes	No organised forensic clinical services available. Subjecting the detainees for examination is at the discretion of the agencies. If the need arises, usually doctors who have no training in clinical forensic medicine undertake such examinations. In larger institutions senior doctors and at times forensic pathologists may examine them.
Currently the duty police officer looks and asks if medical attention is required. Most duty officers are quite liberal in referring the individuals to the Emergency Department.	A Government doctor	Police surgeons	Generally not unless they become ill. Any government doctor in the nearest hospital may undertake such an examination.
Yes, they will most certainly be sent to the Emergency Department. Registered addicts, will occasionally be taken to a Methadone Clinic if they are suffering from withdrawal.	Yes	Yes	Not routinely
There are generic guidelines for all in custody none specific to the police.	The Protection of Human Rights Act 1993, stipulates detailed provisions regarding this.	Yes	Yes. 'Inspector General's Standing Order'
Forensic pathologists/doctors mainly. Accident & Emergency doctors occasionally and family planning doctors. The latter when the victims do not wish to report the incident to police	Different centres have different protocols (eg in this institution, gynaecologists – mainly females)	Forensic pathologists	In major hospitals there may be fixed protocols. Some forensic physicians, primary care physicians, emergency medicine physicians and gynaecologists undertake such examinations. In smaller hospitals non-specialist physicians do the examinations. In some cases forensic pathologists.
Forensic pathologists/doctors mainly.	Different centres have different protocols (in this institution, forensic medicine specialists). A bizarre situation, where the victim goes to the gynaecology department, while the accused in the same case comes to us	Forensic pathologists	See above

Question	Netherlands	Nigeria	Scotland	Serbia
Is there a formal system in your country (or state) by which the police and judicial system can get immediate access to medical and/or forensic assessment of individuals detained in police custody (prisoners)?	Yes	Yes (for medical reasons) dependent on the availability of the physician.	Yes. Police retain services of doctors not all necessarily qualified in clinical forensic medicine.	Yes – via the public health system. Generally for treatment purposes. Also, if considered necessary for evidence collection (by the investigator appointed under the Criminal Procedure Act – CPA) the police will refer to prosecutor in charge seeking for his/her permission to call a forensic doctor.
Who examines or assesses individuals detained in police custody to determine whether they are medically fit to stay in police custody?	Generally speaking: Public Health Officers, who are qualified in clinical forensic medicine	Any doctor attached to Prison Services, the Police or doctors in the local Hospitals, depending on who is available.	Forensic physicians – these doctors are not employees. Nursing schemes have been mooted but not yet been implemented	If there is an obvious health problem, or if they have certain diseases that need medical attention, police will take them to a public health care facility or, in the case of emergency, call ambulance.
If a prisoner is suspected of being under the influence of drugs or alcohol in police custody, is it usual for them to be examined by a doctor (or other healthcare professional) to determine whether they are fit to remain in custody?	Yes	No	Only when a need is established or the prisoner requests medical assistance. Profound intoxication or suspicion of head injury would be an indication for examination	Intoxicated detainees may be requested to provide a blood or other appropriate samples for analysis. The request can be refused. Samples are arranged outside police premises, usually in the public health institutions.
Does your country/state have specific codes/laws/statutes or regulations that make provision for the welfare of individuals in police custody?	Yes	Not aware of any	Local procedures for each police force based on central guidance, but there is no statute	No
Who undertakes the forensic medical examination and assessment of alleged victims of sexual assault?	Generally Public Health Officers, qualified in clinical forensic medicine	Primary care physicians (GPs) and Medical Officers in local hospitals.	Usually Forensic physician, some may be admitted to hospital and b examined by hospital staff.	There is no standard procedure for the examination of alleged victims of sexual assault. There are no protocols for the examination of victims, or for collection of forensic samples .
Who undertakes the forensic medical examination and assessment of alleged perpetrators of sexual assault?	Generally speaking: Public Health Officers, who are qualified in clinical forensic medicine	See above	Forensic physician (although experienced police surgeons are not readily available in some sparsely populated areas, and the inexperienced are often reluctant to embark on such an examination).	In practical terms rarely done although the CPA allows examination of alleged perpetrators of any crime (including sexual assault) for forensic purposes even without their consent if the examination itself is not considered harmful for them.

<i>South Africa</i>	<i>Spain</i>	<i>Sweden</i>	<i>Switzerland</i>	<i>US</i>
Yes, but not in all the parts of the country.	Yes, any individual detained in police custody has the right to be examined by a doctor. In certain cases has the right to have a forensic assessment by the Forensic Surgeon Corps of the Ministry of Justice.	Yes.	Yes.	Yes. Medical assessment is performed by a nurse or family physician at the jail. Forensic issues can be addressed by the on-call clinical forensic nurse if the detained individuals are not in the jail but in the hospital.
Not always – psychiatrist in some cases.	When a person is under arrest (without having being put under regulation), he asks for being examined by a doctor, he is usually transferred to the Spanish Health Public System doctors. The forensic surgeon takes part, exceptionally.	So called "police doctors", who usually are general practitioners.	The "prison doctor": either a doctor of internal medicine of University Hospital or in rural regions the district physician (acute cases) A forensic doctor of the Institute of Legal Medicine of the University of Zürich (not urgent cases, "chronic cases")	Jail nurse or physician (family medicine trained)
Yes, but not common practice.	Yes, he is often to be examined and even blood samples to be extracted (with his previous consent) if the prisoner is involved in some aggression, homicide or car driving, for example.	Yes. In most custody suites a nurse is employed nurse who will call a doctor.	Yes, see above	Examined by the jail nurse 24 hours/day or by jail physician 0800 to 1700. After that prisoner would be transferred to the University Hospital Emergency Department.
Yes	Yes, there are specific rules in Constitution and in the Penal Code.	Not known.	Yes	Yes
Medical practitioner	A forensic surgeon (médico forense) and a gynaecologist (if the victim is female) or a proctologist (if the victim is male).	The police are free to engage any doctor to do this. In cases of assault on adults the examination is undertaken by specialists in forensic medicine in a small fraction of the cases. A specialist in paediatric medicine or surgery always examines children, often but not always, together with a specialist in forensic medicine.	Physicians of Institute of Legal Medicine of University of Zurich (District Physician) Physicians of University Department of Gynecology, University Hospital Zurich	Sexual Assault Nurse Examiners, Emergency Department physicians
Medical practitioner	A forensic surgeon.	Similar to the procedures of adult victims	Physicians of Institute of Legal Medicine of University of Zurich (District Physician)	Sexual Assault Nurse Examiners, Emergency Department physicians

Table 3 Continued

Question	Australia	England & Wales	Germany
In cases of sexual assault is it always possible for victim, perpetrator or both to be examined by a doctor of the same gender if that is requested?	Generally, yes.	Generally, yes – but not always possible	Yes
Who undertakes the forensic medical examination and assessment of alleged child victims of <i>sexual</i> assault?	Forensic Medical Officers or paediatricians	Forensic physicians and/or paediatricians. Ideally joint examinations (guidelines for the assessment have been issued)	Either pediatrician gynaecologist or medicolegal specialist.
Who undertakes the forensic medical examination and assessment of alleged child victims of <i>physical</i> assault?	Forensic Medical Officers or paediatricians	Forensic physicians and/or paediatricians.	Pediatrician or medicolegal specialist
Is there a system in your country/state whereby individuals detained in police custody who appear to have (or have) psychiatric disorder or mental health problems or learning disability – may be assessed?	Yes	Yes	Yes
In your country/state are there specialised units or locations where victims of sexual assault are examined or assessed?	Yes	Yes – but not full geographical coverage – tends to be in urban centres	No
In cases of alleged assault by police who examines <i>the police personnel</i> ?	Forensic Medical Officers (report & documentation of injuries) Police Medical Officers (for any occupational health and safety issues)	Forensic physicians	An independent medical doctor
In cases of alleged assault by police who examines <i>the complainant</i> ?	Forensic Medical Officers (report & documentation of injuries)	Forensic physicians	An independent medical doctor
In your country/state – is there a person, a body or an organisation that investigates complaints against the police?	Yes	Yes. The Police Complaints Authority. Replaced by the Independent Police Complaints Commission (IPCC) in 2004	State Prosecutor
If your country has a person, a body or an organisation that investigates complaints against the police, a) is it completely independent of the police? – and b) who funds it?	a) Two bodies Police - Internal Investigations Government body - Ombudsman's Office b) Government funded	a) the PCA is independent of the police. Police forces also appoint other police forces to investigate b) the Government	a) Yes b) Judicial system

<i>Hong Kong</i>	<i>India</i>	<i>Israel</i>	<i>Malaysia</i>
No, There is currently only 1 full-time female forensic doctor able to do this.	Yes, if requested, a doctor of the same gender would be arranged. This would generally apply only to the victim (female gynaecologists examine the victim anyway) The wishes of the accused are not always observed. It is highly unusual for a female to examine a male accused.	Not always	It may be accommodated if possible
Forensic pathologists/physicians, pediatricians, obstetricians and gynaecologists doctors. Sometimes jointly.	Female children – gynaecologist, preferably female (which is generally the case anyway) Male children – forensic personnel of either sex	Forensic pathologists and paediatricians	Wherever possible by paediatricians or gynaecologists. Smaller hospitals by non-specialist physicians.
Pediatricians. Sometimes forensic pathologists/physicians. Sometimes jointly.	Forensic medicine departments	Forensic pathologists and paediatricians	Paediatrician smaller hospitals by non-specialist physicians
Yes. They are likely to be referred to psychiatrists or in the case of learning disability to social workers and/or clinical psychologists.	Yes, in theory. This may not be strictly observed, until and unless there is a court order which may need to be obtained by relatives.	Yes	Yes
There are purpose built video interview and medical examination suites. These tend to be used only when there is a strong likelihood of prosecution. Often done in pediatric wards.	No	Yes	Some major hospitals have 'One stop centers' with protocols for managements, both short term and long terms.
The majority are examined by emergency medicine physicians. Some are examined by forensic pathologists/physicians	No experience of this – if needed probably forensic pathologist	Forensic pathologist	Any available physician
The majority are examined by emergency medicine specialists. Some are examined by forensic pathologists/physicians	Forensic pathologist	Forensic pathologist	See above
Yes. All complaints are handled by the Complaints Against Police Office (CAPO) (part of the police) but all cases are then reviewed by a statutory board the Independent Police Complaints Council (IPCC).	Yes. Via the Police Commissioner. Or to the magistrate. Probably rarely used.	Yes	There are human rights groups. Police also conduct investigations against their own staff
a) CAPO – No. Police establishment b) IPCC – Yes. Funded by taxpayer	a) Police Commissioner is from the police stream itself. Magistrates are completely independent of the police. b) Government.	a) Yes b) Ministry of Justice	b) there are NGOs who back the victims and provide support. Police conducts its own investigations. Outcome of the investigation depends on various factors (same in many countries)

Question	Netherlands	Nigeria	Scotland	Serbia
In cases of sexual assault is it always possible for victim, perpetrator or both to be examined by a doctor of the same gender if that is requested?	Usually but not always	No	Not always, but every effort is made to comply with an examinee's wishes	There is no statutory provision that regulates free choice of either victim or perpetrator to be examined by a doctor of preferred (same) gender.
Who undertakes the forensic medical examination and assessment of alleged child victims of <i>sexual</i> assault?	Generally speaking: Public Health Officers qualified in clinical forensic medicine	Same as above	In the larger centres joint paediatric/forensic physician examinations common. Others centres it varies.	Physicians with forensic training are rarely involved in initial examination and assessment. Forensic physicians tend to get involved at a later stage of investigation.
Who undertakes the forensic medical examination and assessment of alleged child victims of <i>physical</i> assault?	Generally speaking: Public Health Officers, qualified in clinical forensic medicine	Same as above.	Mostly paediatricians but some evidence is based on findings of family physicians	Formerly. Few forensic pathologists were involved. Situation is somewhat improved, but still poor cooperation between clinicians and forensic doctors.
Is there a system in your country/state whereby individuals detained in police custody who appear to have (or have) psychiatric disorder or mental health problems or learning disability – may be assessed?	Yes	Yes	Variable picture. Screening by forensic physician. On call psychiatrist or mental health team in some areas. No s12 procedure. Some courts have regular pretrial psychiatric attendance	Not when in police custody (within 48 hours after arrest). If suspect is detained on the order of the investigative judge, then may be examined by psychiatrist and/or psychologist upon need.
In your country/state are there specialised units or locations where victims of sexual assault are examined or assessed?	Sometimes but not always	No	Specialised units widely available, often on police premises. Children usually in hospital	No
In cases of alleged assault by police who examines <i>the police personnel</i> ?	Generally speaking: Public Health Officers, qualified in clinical forensic medicine	Physician attached to the Police Service - could be a uniformed officer.	Forensic physician (unless urgent transfer to hospital)	Physicians working for public health care system.
In cases of alleged assault by police who examines <i>the complainant</i> ?	Generally speaking: Public Health Officers, qualified in clinical forensic medicine	Medical Officer in the local hospital; (if he is lucky to have the opportunity and guts to complain)	Forensic physician (unless urgent transfer to hospital)	See above
In your country/state – is there a person, a body or an organisation that investigates complaints against the police?	Yes	A Tribunal would be set up if the issue is considered to be of significant national interest.	The Procurator Fiscal (public prosecutor – legally qualified civil servants). Complaints must be referred by police where any criminality is alleged	There is a Commission for Complaints within the police services as a first tier. Within the Ministry of Interior there is a second tier. Victims of police assault can also report directly to the Court of Law in accordance with the Penal Code, and CPA.
If your country has a person, a body or an organisation that investigates complaints against the police, a) is it completely independent of the police? – and b) who funds it?	a) yes (directly under the national prosecutor's office) b) Ministry Of Justice	a) No b) Government	a) No. Complaints are investigated by police unless criminality is suspected, when immediate report to regional Procurator Fiscal is mandatory; b) cases taken by the Procurator Fiscal are centrally funded	a) No. As part of the police and Ministry of Interior the Commission, on both tiers, is not independent from the police.

<i>South Africa</i>	<i>Spain</i>	<i>Sweden</i>	<i>Switzerland</i>	<i>US</i>
Yes	No. It depends on the doctor on duty.	No.	Yes	No. If available, an attempt will be made to have same sex examiner but not always possible.
Medical practitioner	A forensic surgeon and a paediatrician.	As for adults.	≤16 years: female gynecologist at University Children Hospital >16 years as adult	Emergency department physician
Medical practitioner	Forensic surgeon and a forensic paediatrician.	As for adult	≤16 years: doctors at University Children Hospital (Trauma-X group) >16 years: doctors of Institute of Legal Medicine of University of Zurich (District Physician)	Forensic nurse and forensic physician
Yes	Yes. If mental health problems apparent case is remitted to a judge and is examined by a forensic surgeon and a psychiatrist.	It's part of the "police doctors" duties, but many custodies do have access to psychiatric consultants.	Those who have known disorders are followed by a specialized forensic psychiatric psychological service. Others are reported by the guards	Yes
Yes	Victims of sexual assault, are examined in gynaecology or paediatrics units of large hospitals.	No	Yes, but only in some cities. In other cases system as with responses above	Yes
Medical practitioner	A forensic surgeon as member of the Ministry of Justice (completely independent of the Police)	Advised that a specialist in forensic medicine should do it.	Physicians of Institute of Legal Medicine, University of Zurich (District Physician)	Emergency department physician or police department's physician
Medical practitioner	A forensic surgeon and a gynaecologist or an urologist.	See above	Physicians of Institute of Legal Medicine, University of Zurich (District Physician)	Emergency department physician, forensic nurse or forensic physician
Independent Complaint Directorate (ICD)	The correspondent court of first instance (the one on duty at the moment when the facts are reported)	Yes	Yes	Internal Affairs unit of police department
a) Yes, (seemingly) b) international organizations	a) Yes. The Police are subordinate to the Court of First Instance. b) The Judge, the judicial Secretary, the district Attorney and the forensic surgeon.	a) No. It's a special unit within the police. b) State	a) Yes b) the state of Zurich	No

Table 3 Continued

<i>Question</i>	<i>Australia</i>	<i>England & Wales</i>	<i>Germany</i>
In your country/state, is there person, a body or an organisation that investigates deaths of individuals whilst in police custody?	Yes	Yes – the PCA (A IPCC - from 2004)	State prosecutor and Forensic Legal medicine
If the answer to the previous question is yes – a) is that person, body or organisation independent of the police, and b) who funds that organisation?	a) Three bodies Police - Homicide Squad & Internal Investigations Coroner's Office Ombudsman's Office b) Government	a) Yes b) Government	a) Yes b) State
In your country/state are statistics published about deaths that have taken place in police custody?	Yes	Yes	Yes
If the answer to the previous question is yes – where, when and how often are those statistics published and do they include an analysis of cause of death (e.g., self-harm, drugs, other violence)?	Coroners Report - all cases Australian Institute of Criminology - annually Complete analysis in all cases.	Annual report of the PCA with breakdown of causes and circumstances of death	Granzow, Püschel, Arch-Kriminol. 1998 Jan-Feb; 201(1-2): 1-10 Includes an analysis of cause of death
Does your country/state have a recognised (recognised by your medical professional body) specialty or sub-specialty of medicine for those working in a) clinical forensic medicine or b) forensic pathology?	a) No b) Yes	a) No b) Yes (as part of the discipline of pathology)	a) No - only in some states in Germany b) Yes
Can you supply with the details a) of the main organisation that represents the interests of such practitioners and b) the number of practitioners represented?	a) Royal Australian College of Pathologists b) Approx 50	a) Association of Forensic Physicians (approx 1000) b) British Association in Forensic Medicine (approx 300 – only 40 or so full-time)	a) German Society of Legal Medicine b) ca. 400

<i>Hong Kong</i>	<i>India</i>	<i>Israel</i>	<i>Malaysia</i>
Yes, The Coroner with a mandatory inquest held in public and with a jury. However, the investigations are conducted by the police.	Yes, the magistrate does it. Police cannot investigate such deaths.	Yes	All deaths in custody are subjected to inquest by the magistrate according to Malaysian Criminal Procedure Code
a) The Coroner – Yes – Funded by Judiciary b) The Police – No	a) Yes, independent of the police b) Government pays the salary	a) Yes b) Ministry of Justice	a) magistrate is independent b) there is no fulltime coroner, magistrate acts as the coroner in normal deaths except custodial deaths where the magistrate acts directly. Most of the deaths are investigated by the police, coroner does not play a visible role. Inquest system needs improvement.
Yes. In the Coroners Annual Report	Yes, There is a publication called "Crime Statistics", which I think is published by the Home Ministry	No	Police HQ maintains all data
The number of occurrences, the custodian department and the verdicts of the inquests are summarised but no details of death itself.	Yearly publication. The figures may be inaccurate or incomplete.	No	Not known whether it is regularly published, but data available
a) Yes & No b) Yes. There is laid out training for forensic pathology under the Hong Kong College of Pathologists which includes clinical forensic medicine aspects. There is also statutory specialty registration but again only in forensic pathology.	a) There is just one super- specialty called forensic medicine, which caters for both (a) clinical forensic medicine as well as (b) forensic pathology	a) Yes b) Yes	a) No b) No
a) N/A b) Hong Kong College of Pathologists, Forensic Pathology Panel – 18	a) Indian Academy of Forensic Medicine (IAFM) b) About 500 people are represented. For more information on IAFM, please visit its website at http://www.fortunecity.com/campus/electrical/314/iafm.html	a) Israel Association of Pathologists b) 12	a) Hospital forensic pathologists come under the Ministry of Health. Others are in the University Departments of Pathology. Forensic Unit comes under pathology. Clinical forensic medicine is mostly a neglected subject

Question	Netherlands	Nigeria	Scotland	Serbia
In your country/state, is there person, a body or an organisation that investigates deaths of individuals whilst in police custody?	Yes	A uniformed police pathologist, rarely a hospital pathologist and in some cases a Medical Officer.	All investigations are under supervision of Procurator Fiscal; there is always a public 'fatal accident inquiry' before a judge	In the case of death in police custody, but also during the police action or allegedly as a result of police action, or while person is in penitentiary, District Court that has territorial jurisdiction should order full postmortem, as well as other investigations.
If the answer to the previous question is yes – a) is that person, body or organisation independent of the police, and b) who funds that organisation?	a) Yes	a) It depends on who does the case. b) Government	All investigations are under supervision of PF; there is always a public 'fatal accident inquiry' before a judge	a) Yes, it is a Court of Law. b) State and Government.
In your country/state are statistics published about deaths that have taken place in police custody?	Yes	No		Not aware of any statistics.
If the answer to the previous question is yes – where, when and how often are those statistics published and do they include an analysis of cause of death (e.g., self-harm, drugs, other violence)?	The prosecutor receives complete autopsy results	Not applicable		N/A
Does your country/state have a recognised (recognised by your medical professional body) specialty or sub-specialty of medicine for those working in a) clinical forensic medicine or b) forensic pathology?	a) No b) No	a) Yes b) Yes Recognition (by the Nigerian Medical Council and Postgraduate Medical College) is strictly as a subspecialty of pathology.	a) as for England & Wales – only that the craft is recognised by British Medical Association b) Yes – as part of pathology	a) Yes b) Yes Specialisation is designated as 'Forensic Medicine' covering both issues. There are no separate specialisations. The model was imported from Germany and France at the beginning of the last century when the first medical faculties were founded in the country.
Can you supply with the details a) of the main organisation that represents the interests of such practitioners and b) the number of practitioners represented?	a) b)	a) There is no professional body that represents these very few specialists b) There are two DMJ Clin. graduates: No Forensic Pathologist (including me) is in Nigeria.	a) AFP and BMA for CFM in UK. Pathologists by BAFM and BMA – the British Medical Association has Forensic Medicine Committee b) AFP 1000 BAFM 100	a) Yugoslav Association of Forensic Medicine b) Approximately 40-50 members.

<i>South Africa</i>	<i>Spain</i>	<i>Sweden</i>	<i>Switzerland</i>	<i>US</i>
Both ICD and forensic pathologist/medical practitioner	Yes. The Court of First Instance (of criminal investigation).	Yes	Yes, the district attorney and the Institute of Legal Medicine	Yes, Medical Examiner
a) Yes b) International Organization	a) Yes. doctors who assist individuals detained and prisoners, are specialists, totally independent of police. b) It is funded by health system doctors (Health Public National System), forensic surgeons (Ministry of Justice) and prisons doctors (Ministry of Justice).	a) Yes. b) The department of justice.	a) Yes (Department of Justice) b) the state of Zurich	a) yes b) county government
Not aware of any statistics	No	No	No	yes
See above	See above	See above	In the state of Zurich: All cases are investigated by the Institute of Legal Medicine to establish the cause and manner of death	annually
a) Yes – utilising a Diploma or Masters degree b) Yes, recognised registered speciality.	a) Yes & No. Each forensic surgeon has undertaken a competitive exam in the Supreme Court - Ministry of Justice. Some, also are specialist in legal and forensic medicine granted by the Ministry of Education. The Ministry of Justice has recognized both for forensic surgeons working in Institutes of Legal Medicine.	a) Yes. b) Yes.	a) Yes b) Yes. The specialist title of "Legal Medicine" covers both sub-specialities.	a) no (courts have recognized CFM as a medical specialty) b) yes
a) Department of Health in collaboration with international organizations (I have attended such a meeting). b) About 80 practitioner	Forensic surgeons form groups in some professional Associations nationwide like the Asociación Nacional de Médicos Forenses, Asociación Andaluza de Médicos Forenses, Asociación Estatal de Médicos Forenses, Asociación Gallega de Médicos Forenses., etc. About 300 forensic surgeons are represented by those Associations. The number of licensed medicolegal-experts in Spain is currently 450 and acting medico-legal experts about 150.	a) The National Forensic Board, under the Department of Justice is responsible for all examinations in the fields of forensic pathology (death investigations), forensic psychiatry, forensic medicine and forensic genetics. All specialists who are active in these fields are employed by this organisation. Competition in these fields is free but does, with the exception for investigations of living victims and perpetrators, not occur. b) There are approximately 25 specialists in forensic medicine in Sweden today.	a) Swiss Society of Legal Medicine (www.legalmed.ch) b) 40	a) NAME, National Association of Medical Examiners b) 400

Table 3 Continued

<i>Question</i>	<i>Australia</i>	<i>England & Wales</i>	<i>Germany</i>
Can you give a rough estimate of a) the population of your country/state, b) the number of medical practitioners working in clinical forensic medicine, c) forensic pathology?	a) State - 5 Million b) ~50 c) ~10	a) 60 million b) ~2000 c) ~40	a) Germany 80 Million/NRW State 16 Mill. b) Germany 150/State 50 c) Germany 250/State 50
Are specific qualifications available for a) clinical forensic medicine or b) forensic pathology?	a) Yes b) Yes	a) DMJ (Clin), DFM, MMJ b) MRCPPath DFM DMJ (Path)	Yes but are the same
Are such qualifications mandatory in order to practice in a) clinical forensic medicine or b) forensic pathology?	a) Yes in full time practice (only) b) Yes	a) No b) Yes	a) Yes b) Yes

<i>Hong Kong</i>	<i>India</i>	<i>Israel</i>	<i>Malaysia</i>
a) 6.5 million b) None fulltime. Over 1000 in different ways c) 18 this group does most of the criminal cases relating to clinical forensic medicine	a) 1.05 Billion b) There is no data available on it. In peripheral regions, such as small towns and villages, even general duty doctors fulfil the work of clinical forensic medicine and forensic pathology. c) same as above.	a) Six million b) Eight c) Same eight	a) 20 million b) 1 trained forensic physician c) ~20 forensic pathologists
a) DMJ (Clin)(Lond.) b) DMJ (Path)(Lond.), FHKCPath, FHKAM	a) Yes, three year post-graduate course in Forensic Medicine, which can only be done by a graduate in medicine and surgery. There is an entrance test for this course. b) Same as above	a) No b) Yes	a) No b) Master of Pathology (Forensic) – 4 year course
a) No b) Yes	a) No, as stated above, they are not mandatory. Although a great prestige is accorded to the report of people who have such a qualification. b) same as above.	a) No b) Yes	a) and b) ordinary doctors undertake a large part of routine autopsies and clinical cases. Depending on the availability, difficult or complicated cases are handled by specialists.

Question	Netherlands	Nigeria	Scotland	Serbia
Can you give a rough estimate of a) the population of your country/state, b) the number of medical practitioners working in clinical forensic medicine, c) forensic pathology?	a) 16 million b) ~350 c) ~5	a) ~120 million b) One part time; a uniformed Police Officer c) Six- all currently outside Nigeria; one of the six has retired.	a) ~5.25 million; b) ~150 and c) ~12 (these are mainly university staff).	a) 7.5 million b) ~40–50 c) ~40–50
Are specific qualifications available for a) clinical forensic medicine or b) forensic pathology?	a) yes b) yes	a) All trained in the UK, Germany and USA. There are no local training programmes.	All UK qualifications e.g., DMJ DFM (not compulsory); pathologists MRCPath DFM DMJ and one available from the RCP (Ed)	Not qualifications but training program
Are such qualifications mandatory in order to practice in a) clinical forensic medicine or b) forensic pathology?	a) not yet b) not officially	a) No b) Locally trained histopathologists and medical officers unfortunately often assume this role.	a) No b) Yes	a) No b) Yes.

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South Africa	Spain	Sweden	Switzerland	US
a) 42 Million b) ~180 (majority of them are part-time basis) c) ~25	a) 0.5 million b) ~9 c) ~9	a) Nine million b) 35 (10 non-specialists in training) c) FM = FP in Sweden	a) 7.2 million b) and c) 70 (most of us do both clinical forensic medicine and forensic pathology)	a) 4 million in state b) 15 c) 14
a) No, but being established b) Yes	The are national test (competitive examinations on Supreme Court-Ministry of Justice) to be admitted in the National Corps of Forensic surgeons (Cuerpo Nacional de Médicos Forenses). The professionals are the ones who carry out both clinical forensic medicine and forensic pathology.	a) Yes b) Yes	a) and b) : Yes qualifications that cover both fields	a) no b) yes
a) No b) Yes, but still unqualified are working.	a) Yes b) Yes	a) Yes b) Yes	a) Yes (but only at University Institutes) b) Yes (but only at University Institutes)	a) no b) yes

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