



# Forensic Investigation In Criminal Trial: An Analysis Of Legal Aspects And Human Rights Challenges.

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## ABSTRACT

This current compilation of "Human Rights Best Practices Relating to Criminal Justice in a Nutshell" primarily assists the legal system, law enforcement, and prosecution teams. Integrating human rights considerations into comprehending and applying criminal procedure standards is the compilation's main concept. According to the Preamble to the Universal Declaration of Human Rights, human rights must be safeguarded by the rule of law, "if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression." According to Article 9 of the same Declaration, "no one shall be subjected to arbitrary detention, arrest, or exile." The Constitution of India also contains various provisions guaranteeing the rights of the accused in all circumstances. While Article 14 guarantees equality before the law and equal protection of the laws, Article 21 states that "no person shall be deprived of his life or personal liberty except according to procedure established by law." Article 22 of the Constitution guarantees protection against arrest and detention in certain cases. It states that no person who is arrested shall be detained in custody without being informed, as soon as may be, of the grounds for such arrest nor shall he be denied the right to consult, and to be defended by, a legal practitioner of his choice. Human rights are focus on life, liberty, and human dignity; without them, people would live more unhappy lives than animals. The adopted procedural and criminal legislation ought to align with the principles of the Constitution and human rights. The criminal justice system includes judges, prosecutors, law enforcement officials, advocates, and litigants. Numerous procedural and criminal statutes control how the cases are handled. However, the core of the legal system in democratic nations controlled by constitutions is the application of the same stricto sensu safeguarding the rights of both the guilty and the victims.

Key words : Human Right ,Investigation, Forensic, Narco-Analysis, Polygraph,Brainmapping, Legal system.

## INTRODUCTION

There are significant clinical, scientific, ethical, and legal ramifications to deception detection tests (DDT), such as polygraphs, narcoanalyses, and brain mapping. The DDTs help us learn about the hidden details of criminal activity. This knowledge, which one knows solely about oneself, can occasionally be very important to a criminal investigation. The investigative agencies have utilized DDTs extensively. Investigating agencies are aware that the material that has been retrieved cannot be used as proof in a court of law, nevertheless. They have refuted the claim that it is less dangerous than the "third-degree methods" employed by certain investigators. Here, the argument is that employing these supposedly "scientific procedures" in fact-finding will directly aid the investigative agencies in gathering evidence, hence raising the prosecution of the guilty and the acquittal of the innocent rates. Without strong supporting data, several techniques have been pushed to be more precise and superior to others in recent times. The Indian Supreme Court made it very apparent in a historic ruling that permission is required before administering DDTs.

Using cruel and dehumanizing techniques to confess to a crime is permitted under the DDT. A crucial part of gathering evidence is questioning the accused. The extent to which the investigating authorities can compel or force the accused to provide information will depend on how mute and unresponsive the accused is to their questioning. To get information regarding a crime, police should not torture someone in a civilized society. Confessions given to police officers are invalid even in legal proceedings. "Can police use DDT to extract information from the accused?" is the issue that now has to be answered. While some agencies view such tests as blatantly violating constitutional principles, others find them helpful in their investigations.

## RESEARCH QUESTION

- 1) Whether these investigation techniques are effectively excised in the Criminal Justice System?
- 2) whether the human rights are protected under Indian legal regime?
- 3) Whether the right to life and privacy of the accused person is infringed by the forensic tests?

## OBJECTIVE

1. Examine the role and significance of forensic evidence in criminal proceedings, elucidating its impact on the determination of guilt or innocence.
2. Evaluate the legal frameworks governing the collection, analysis, and presentation of forensic evidence, focusing on both national and international perspectives.
3. Identify and assess the human rights implications inherent in forensic investigation, including issues of privacy, due process, and the potential for wrongful convictions.
4. Investigate the challenges and limitations faced by forensic practitioners and legal professionals in ensuring the integrity and reliability of forensic evidence.

## RESEARCH METHODOLOGY

The methodology adopted for the research is by Doctrinal method involving critical analysis of primary and secondary sources of data collected to determine validity of narco -analysis test , Polygraph and brain mapping under constitution and to give ideas about self-incrimination, right to privacy and right to life and personal liberty.

### International perspective

There are no specific norms on the Narco analysis test from an international perspective. But some convention, declaration, act/legislation international protect the rights of the accused. These rights following:

#### 1. Universal Declaration of Human Right-1948(UDHR)

- Everyone has the right to life, liberty, and security of person.
- No one shall be subjected to torture or cruel, inhuman or degrading treatment or punishment.
- Everyone charged with a penal offence has the right to be presumed innocent until proved guilty according to the law in a public trial at which he has had all the guarantees necessary for his defiance.

#### 2. International Convention on Civil and Political Rights 1966 (ICCPR)

- Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life.
- No one shall be subjected to torture or cruel, inhuman or degrading treatment or punishment. In particular, no one shall be subjected without his free consent to medical or scientific experimentation.
- Not to be compelled to testify against him or to confess guilt.
- European Convention for the Protection of Human Rights and Fundamental Freedom-1950
- Right to life
- No one shall be subjected to torture or inhuman or degrading treatment or punishment.
- Right to the free trial.

4. Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) 1984

5. United Nations Body of Principal for the Protection of all Persons under any Form of Detention or Imprisonment-1988

### Indian perspective

In India no specific act /legislation on the Narco analysis test. But the Indian constitution, Cr. P.C, Evidence,etc. provide rights.

These rights following:

1. Protection against self-incrimination Article 20 (3) Article 20 (3) is the syncretistic result of the Anglo-sax on Jurisprudence and India's realities, culture, and ethos, proving once against the cosmological nexus of human rights jurisprudence the world over. The main provision regarding crime investigation and trial in the Indian Constitution is Article 20(3).It deals with the privilege against self-incrimination. It has its equivalents in the Magna Carta, the Talmud, and the law of almost every civilized country. Crime against self does not come under the category of privilege under the common law. Under criminal jurisprudence, this theory has the following characteristics:

- I. The accused is presumed to be innocent,
- II. That it is for the prosecution to establish his guilt,
- III. That the accused need not make any statement against his will.

### **Previous DDT Judgments**

In a historic ruling, the Madras High Court held that the investigating body must finish the inquiry in a fair amount of time; otherwise, the accused is granted the benefit of the delay. If the accused refuses to cooperate with the investigative procedures utilized during detention to solve the crime's mystery, scientific methods of inquiry may need to be used to discover the truth. Following the same precedent in a different ruling, the court determined that the narco-analysis test is a step that helps with the investigation. Given that it could result in the gathering of further evidence, it provides a crucial foundation for future research.

Thus, in light of the rise in crimes against society, it is imperative to consider the needs of society as a whole as well as the requirement for an exhaustive and appropriate inquiry in opposition to individual rights while making sure that constitutional rights are not violated. Therefore, the court believes that the narco-analysis test is constitutionally sound because it is an investigative step and any self-incriminating remark provided by the accused cannot be utilized or relied upon by the prosecution. The court mandated that the accused submit to the narco-analysis test within the allotted time. It was evident from these rulings that the use of DDTs in investigations was justified.

### **Recent DDT ruling from the Supreme Court**

Some basic rights, including the following, were allegedly violated by the Supreme Court's May 5, 2010 ruling on the forcible administration of DDT to enhance criminal investigative efforts.

- (i) The Constitution's "Right against self-incrimination," which prohibits compelling someone accused of a crime to testify against themselves, is listed in Article 20(3).
- (ii) The right to life and personal liberty, guaranteed by Article 21, has been judicially expanded to include a "right against cruel, inhuman, or degrading treatment."

In addition to violating a person's human rights, DDT also raises grave questions about the morality of the medical professionals who use these methods. The National Human Rights Commission released Guidelines for the Administration of Polygraph Tests in 2000 in response to concerns voiced about long-standing human

rights breaches during DDT administrations. Nevertheless, it appears that very few of the investigative authorities adhere to these rules.

### Scientific evidence

**Narco-analysis:** In this test, a medication (such as sodium pentothal, scopolamine, or sodium amytal) is administered intravenously to the individual, causing them to go through many phases of anesthesia. When under hypnosis, a subject's inhibitions drop and they are more likely to give things that they would not normally tell when aware. Additionally, he or she may reveal all of their dreams, desires, instincts, and innate drive, as well as any disputes, misinterpretations, illusions, or delusions. The fundamental disadvantage of this method is that while some people may continue to lie even when under hypnosis, others might become quite suggestible when questioned. This is particularly concerning since investigators could ask inquiries that lead to confessions.

The person may not always tell the truth despite the usage of medications. The admission of comments made during a hypnotic condition into evidence has been denied in legal proceedings due to their non-voluntary nature and lack of clarity of mind. To wake someone from a hypnotic state so they can answer questions, narco-analysis "without consent" raises several concerns. These include (i) a physical assault on the body through injections and multiple painful stimuli like slapping, pinching, pushing, hitting, shaking the body, and so forth; and

(ii) a mental assault through the effect of the injection on his or her mind and also unrestricted access to the utmost privacy, the privacy of one's mind.

It has no bearing whatsoever on the management of any mental illness in the age of evidence-based medicine. Despite being known since World War II, this technique's claims have not been sufficiently substantiated by study.

**Polygraph:** The title "polygraph" is misleading because it is also known as a lie detector test. Polygraph tests are designed to detect hyper-arousal, which is detected by an individual skilled in interpreting the test findings. The assumption behind the test is that an individual who is guilty is more likely to be preoccupied with lying about the pertinent details of the crime. Skin conductance, heart rate, blood pressure, respiration rate, and electromyography are some of the factors that are used to measure the hyper-arousal state. Since the detected variations in arousal state are not always caused by lying or deceit, the underlying concept of these tests is questionable. Alternatively, they might be brought on by other emotions or by uneasiness, worry, dread, bewilderment, hypoglycaemia, psychosis, sadness, or substance-induced states (such as withdrawal from stimulants or nicotine). The questioning style of the investigating police has also been linked to this condition. Yet, a skilled individual who knows how to manage or conceal their arousal symptoms through yoga, meditation, and other practices may easily ace a polygraph test. Because of this, empirical research has frequently questioned the validity of the polygraph exam.

Brain mapping: Using electrodes applied to the skin's surface across the head and face, it analyses variations in the electrical field potentials generated by the total amount of neuronal activity in the brain. Event-related potentials are the alterations that are specifically linked to particular perceptual or cognitive events. Said another way, its foundation is in the discovery that when someone experiences a known stimulus, their brain produces a distinct brain-wave pattern. The Brain Electrical Activation Profile test, also referred to as the "P300 Waves test," is a frequently employed technique in India.

## **THE RIGHTS OF ACCUSED: A NATIONAL AND INTERNATIONAL HUMAN RIGHT PERSPECTIVES**

Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (CAT)

United Nations Body of Principal for the Protection of all Persons under any Form of Detention or Imprisonment-1988

Indian perspective:

In India no specific act /legislation on the Narco analysis test. But the Indian constitution, Cr. P.C, Evidence, etc. provide rights. These rights following:

### **1. Protection against self-incrimination Article 20 (3)**

Article 20(3) which embodies this privilege read, "No person accused of any offence shall be compelled to be a witness against himself".

The syncretistic outcome of the Anglo-Saxon influence on Indian reality, culture, and ethos is reflected in Article 20 (3), which challenges the global human rights jurisprudence's cosmological foundation. Article 20(3) of the Indian Constitution is the primary clause about criminal inquiry and prosecution. The privilege against self-incrimination is discussed. Its counterparts may be found in the Talmud, the Magna Carta, and nearly all national legal systems. Under common law, a crime against oneself does not fall under the privilege doctrine. The administration of medication is the method used in the Narco analysis test. The medication impairs the patient's ability to remember things and think clearly. Article 20(3) of the Indian Constitution shall be violated if the accused delivers a statement while under any form of coercion, either physical or moral. The court will reject it. Any information provided by the accused during the Narco Analysis Test cannot be regarded as a confession as it is not founded on his knowledge. All of those things are already on his mind, regardless of what he says. A person's right to self-incrimination and the principle of "substantive due process" are violated when their mental processes are interfered with forcefully. Under Article 20(3) of the Indian Constitution, is it possible for someone to give up their fundamental rights? When taking the Narco Analysis Test, the subject answers honestly and freely about the methods used. Thus, it is against his right to privacy. The authors of the constitution considered that the accused should be shielded against coerced testimony and coerced confessions since they were aware of the misuse of these tools by individuals. One cannot forego a basic right just because the goal of entering the box has been achieved. The basic right to grant consent will not apply to an accused person if he willingly consents to the Narco Analysis

Test. However, the state is not allowed to force someone to give up their basic rights. If the accused makes a statement while being coerced, it falls under the category of coerced testimony, in which case Article 20(3) protects the accused.

## **2.Right to privacy**

As stated in Article 12 ("no one shall be subject to arbitrary interference with his privacy, family, home, or correspondence"), the right to privacy has been acknowledged as a fundamental human right. Compulsory medical testing is strongly related to the right to respect for private and family life as stated in the European Convention on Human Rights and Fundamental Freedoms. The parameters of the "prohibition against discrimination" were established by Article 14. It has also been acknowledged that the right to privacy is a basic freedom protected by Article 21 of the Indian Constitution. According to Justice Subba Rao, privacy was a necessary component of personal liberty as defined by Article 21.

**3.The right to informed consent** must be respected in order to administer the Narco Analysis Test. This means that the accused must be made aware of the circumstances and given his assent. Before obtaining the accused's free assent, it is important to inform him of the consequences of the Narco Analysis Test, including how the next interrogation procedure may influence his legal status, physical health, and psychological well-being. In contrast, the Indian judiciary has embraced the stance that the accused's agreement is not required for the Narco Analysis Test in any given case. The Supreme Court ruled that the courts' rationale for taking this stance is that standard investigative techniques include narcotics analysis.

**4.Right to Health:** Everybody is entitled to a living standard sufficient for their own and their families' health and well-being, including access to healthcare. It has also been ruled that the right to life includes the right to health. Even though X-rays and city scans are used for disease diagnosis, they may have negative side effects. During the Narco analysis, harmful side effects were found to be untenable merely because similar substances are also prescribed to patients as medicines despite their side effects. According to the paper, chemicals employed in scientific experiments are utilized at lower concentrations than in therapeutic interventions. Regarding the Narco Analysis Test, the Apex Court has established new legal precedent. However, the argument has not succeeded in proving that a person's right to health is guaranteed by the constitution. The accused's physical and mental health suffer as a result of the medication used during the Narco Analysis Test.

**5.Right to a fair trial:** If the accused's remarks in the Narco Analysis Test are recorded and then made public, the accused's right is being infringed. In "Compelled testimony," the Supreme Court construed it to mean not only physical threats or violence but also psychological torture, atmospheric pressure, environmental coercion, exhausting interrogation prolixity, overbearing, intimidation tactics, and similar practices. The Criminal Procedure Code has granted an investigating agency the authority to look into the offense and ascertain its cause. The Court lacks the authority to determine the course of the inquiry. However, the court may halt the forced testimony. The accused's right to a fair trial would be violated if this were not done. In criminal law, the public prosecutor bears the burden of proof when it comes to evidence. The accused's

constitutional rights are violated by the Narco analysis test, which places the burden of evidence on them. Presumption of fact or law operates in every legal system, according to the extent of the prosecution's burden of proof and the accused's burden of proof. The "right to a fair trial" will be violated if any reliance is placed on the findings or testimony obtained from any of the contested techniques.

**6.Right to Silence:** Article 19 (1) (a) guarantees every citizen the freedom of speech and expression. Silence is another one of these rights. Under the conditions outlined in Article 19, this right may be limited (2) On the other hand, the law is the only source of appropriate restraint.

## CONCLUSION

In conclusion, we have chosen an adversarial decision approach rather than an inquisitorial one. The criminal jurisprudence that currently governs India will be called into question, as would the theory that an innocent person should not be apprehended even if a hundred offenders escape punishment if the polygraph, narcotics analysis, and other tests are maintained in effect or used in an inquiry. In summary, DDT has drawn a lot of criticism, and it's still not clear how much brain mapping and lie detectors can be utilized to uncover hidden information in practical, real-world contexts. Involuntary DDTs have no place in the legal system, according to the Supreme Court's ruling. Rather, it will impede progress, create bottlenecks, and result in a plethora of issues that will leave the process with no more assurance than it already has. Extensive studies on modern DDT are required in both normal and sick populations. It is best to avoid using these technologies outside of research settings too soon. It is also necessary to investigate how susceptible the methods are to countermeasures. It's also critical to understand the tests' sensitivity and specificity. Standard operating procedures must be followed when doing DDT. From the standpoints of science, human rights, ethics, law, and the Constitution, the recent DDT ruling by the Supreme Court is excellent.

## SUGGESTION

To delve deeper into the topic of "Forensic investigation in criminal trial: An Analysis of legal aspects and human rights challenges," consider exploring case studies or real-life examples that highlight the intricate dynamics between forensic evidence, legal procedures, and human rights considerations. By examining specific instances where forensic evidence played a pivotal role in criminal proceedings, you can elucidate the practical implications of legal frameworks and human rights standards.

Additionally, consider conducting interviews or surveys with legal experts, forensic scientists, human rights advocates, and individuals involved in criminal justice systems to gather diverse perspectives and insights. These firsthand accounts can provide valuable context and enrich your analysis of the complexities inherent in forensic investigation within the realm of criminal trials.

Furthermore, it could be beneficial to juxtapose different jurisdictional approaches to forensic investigation and their respective implications for human rights protection. By comparing practices across countries or



regions, you can identify variations in legal standards, procedural safeguards, and challenges encountered in ensuring the fair and ethical use of forensic evidence.

Lastly, consider proposing recommendations or best practices aimed at addressing the identified human rights challenges and enhancing the integrity and reliability of forensic investigation in criminal trials. This forward-looking approach can contribute to the ongoing discourse on improving the intersection of forensic science, law, and human rights within the criminal justice system.

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