



SCIENTIFIC CRIME DETECTION TESTS AND EVIDENTIARY VALUE IN INDIA IN RELATION TO HUMAN RIGHTS*

INTRODUCTION

Torture and human rights violations do not begin and end merely with physical violence and blood. The perpetrators of human rights violations have also the most unlikely collaborators in doctors, who are believed to have the kindest countenance to human sufferings. The doctors are involved in administration of drugs to induce a state of stupor in suspected criminals to splutter the hidden truth; they plant devices on human bodies to study brain, heart and intestines; monitor human response to questioning in police interrogation; they examine breath, blood, urine, semen, DNA to detect or determine commission of crimes; they also administer drugs on human subjects, particularly to the vulnerable sections without consent or with consent that is close to deception and exploitation for testing the efficacy of drugs. The purpose of the essay is to highlight the frontiers of human rights violations where the medical personnel dangerously tread. Many of the examples and cases of human rights violations through medical personnel examined here have been taken from foreign countries, not because they do not happen in India but our courts are less responsive to invasion of privacy and the public adopt too paternalistic a view on doctor's goodness to venture an objective inquisitorial exercise concerning the medical personnel.

SCIENTIFIC METHODS OF INTERROGATION

The "scientific methods of investigation" are criticized on the ground that these are not 100% accurate. Found in various cases that certain subjects made totally false statements. These Deception Detection Tests are Tests are unsuccessful in bringing out the truth as such it should not been used to compare the statement already given to them, the police before the conducting of these tests. It has been found that the accused has given false information even after conduction and subjecting to these truth finding tests. These will not help in case of evasive & untruthful person¹.

The key difference between a guilty party and on innocent person is that perpetrator of the crime has a record of the crime stored in their brain, and the innocent suspect does not. Until the invention of polygraph, Narco analysis & Neuroscientist Lawrence Farwell's "brain finger printing" technology, which measure an electrical signal called P300 waves as the neuro scientific testimony to collect the credible evidence, there was no scientific valid way to detect these lies or

* M. Madhavilatha, M.A; LL.B; LL.M(gold medal), Research Scholar;Law Department, Sri Krishna Devaraya University.

¹ Albert W. Alschuler, *A Peculiar Privilege in Historical Perspective: The Right to remain silent*, 94(8) MICHIGAN LAW REVIEW 2625, 2627 (1995).

vice-versa establish the truth, however the scientific validity of the impugned techniques has been questioned and it is argued that their results are not entirely trust worthy, veritable & reliable. The following are the methods

POLYGRAPH OR LIE DETECTION TEST:-

It is an examination, which is only based on the “assumption” that there is an interaction between the mind and body and is conducted by various components or the sensors of polygraph machine, which are attached to the body of the accused, who is interrogated by the expert. The machine records the blood pressure, pulse rate & respiration & muscle movements. Polygraph test is conducted in three phases (a) pre-test interview, (b) chart recording (c) Diagnosis. The examiner will prepare “Questionnaire” taking the criminal charges & statements made by the suspect. Lying by a suspect is accompanied by specific perceptible physiological & behavioral changes and the sensors and a wave pattern in the graph expose this. Deviation from the baseline as a sign of lie.

P300 OR THE BRAIN MAPPING TEST:-

In this method, called the “Brain wave finger printing” the accused is first interviewed & interrogated to find out whether he is concealing any information. Then sensors are attached to the subjects head & the person is seated before the computer monitor. He is then shown certain images or made to hear certain sounds. Then sensors monitor electrical activity in the brain and register P300 waves, which are generated only if the subject has connection with the stimulus i.e. picture or sound. The subject is not asked any questions.

NARCO ANALYSIS:-

The term narco-analysis is derived from the Greek work “nark” which means “numbness” or “anesthesia” or “torpor” Narco-analysis means psycho-analysis using psychotropic drugs to induce a state tending to sleep. The accused, witness or suspect is given chemical drugs like sodium pentothal by the police or investigating agencies to make him fall in a hypnotic state so as to make him reveal some information which may be reluctant to reveal while in conscious state. The central nervous system of the body of the subject is depressed by the drug. Which puts the subject to hypnotic state and it is believed that in such a trance like situations the individual cannot speak anything but the truth.

In India Narco-analysis test is carried out by a team comprising of an anesthesiologist, a psychiatrist a clinical forensic psychologist an audio-videographer & supporting nursing staff. The forensic psychologist will prepare the report about the revelations which will be accompanied by a compact disc of audio-video recordings.

“These Deception Detection Tests has raised several issues of legal importance, for Ex:- Its admissibility in evidence, encroachment on personal liberty, freedom of speech, freedom of life and “Truth finding Tests” are violating the fundamental Rights of the Indian constitution, Human Rights & Procedural laws. These Tests are also termed as psychological “Third degree methods”²”.

DNA ANALYSIS:

²Deepak Ratan and Mohd. H. Zaidi, *Application of Forensic Science in India and World* 28 (Alia Law Agency, Allahabad, edn. 2008).

³John I. Thornton, “Uses and Abuses of Forensic Science”69 American Bar Association Journal 289(1983).

DNA is the abbreviation for deoxyribonucleic acid which is the genetic material present in the nucleus of the cells in all living organisms³. DNA has been called the blue print of life, since it contains all of the information required to make an organism grow and develop. DNA is found in all cells with a nucleus and is the same throughout the body, so virtually every fluid or tissue from a human contains some DNA and can be analyzed by DNA identification testing. DNA also is stable and does not change over time so samples collected years ago may be compared to samples collected recently. In order to use DNA profiling, it is necessary to obtain certain types of body material. The sample may be obtained by chance. In a case where the sample is obtained without coercion (blood samples, hair follicle from the defendant's clothing the sample is lawfully obtained both in India and many other countries. According to this view DNA testing as such is an interference with the right to integrity of the body resulting from prior interference, caused by the taking of body materials against the suspect's will. According to Supreme Court taking of body tissue from the suspect for the purpose of DNA testing is not permitted under the existing laws.

HUMAN RIGHTS VIOLATED UNDER SCIENTIFIC METHODS

Art. 12-“Right to Life³”

Art. 19 - Protection of Right regarding “freedom of speech”.

Art. 20 - “Protection in respect of “Conviction for Offences”

Art. 20(3) - “Right to self incrimination”

Art. 3 of Human Rights in relation to “Universal Declaration of Human rights.

“Nemo Tenetur se Ipsum Accusare” – Legal maxim explains that “No man, not even the accused himself can be compelled to answer any question, which may tend to prove him guilty of a crime, he has been accused of.

ART 12 – “Right to life”. It says that the fundamental right of the Indian constitution has given every citizen Right to live & life irrespective of caste, sex, religion e.t.c. It guarantees “The Right to Life”; if it was violated, the victim can reach the court of law for such fundamental Rights³.

ART 19:- “Right to freedom of speech”. This says that the every citizen has the right to freedom of speech. It is not necessary even for the accused to obey his crime until he is proved to be guilty. He has freedom of speech and he is allowed to say against the crime. Though he is involved in committing the crime.

ART 20:- “Protection in respect of conviction for offences”. This fundamental Right itself says that the accused has the “right to defend” his crime and he should not be compelled or forced to agree the crime, he involved or committed in. he has the right to take legal aid of his choice & defend the crime.

ART 20(3):- “Right against self incrimination” .It is a right pertaining to a person accused of an offence. It is protection against compulsion to be a witness & such compulsion resulting in his giving evidence against himself.

³ Yash pal Singh and Mohd. Hasan Zaidi, *Narco-Analysis, Brain Mapping, Hypnosis and Lie Detector Test* (Allia Law Agency edn.2000).

³ “Admissibility of Scientific Evidence and the Bias against Lie Detection available”, available at: www.legalservice.com

“Right to silence” comes under this & says that it is not necessary to answer the every question asked to him and he has right to maintain silence⁴.

ART 3 of Human Rights: It states and against the procedure of forced confessions & admissions. Any citizen should not be subjected to any kind of “Torture” either psychologically or physically.

Right to Privacy: Art 12 of Universal declaration of Human Rights says “No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence” subjecting an individual to compulsory medical tests is closely related to the interference by the state with individuals privacy.

Right to Health: Art 25 of the Universal declaration of Human Rights guarantees Right to health as a human right; which says everyone has the right to a standard of living adequate for the health and well being of himself and of his family including medical care. Right to health has been held to be a part of right to life under Art 21 of Indian constitution.

Art 14(3) (g) of International convention on Civil and Political rights provides. In the determination of any criminal charge against him, everyone shall be entitled to the following guarantees.....

Not to be compelled to testify against himself or to confess guilt⁵.

JUDICIAL POLICY TOWARDS DECEPTION DETECTION TESTS

Clause (3) of Article 20 provides that no person accused of any offence shall be compelled to be a witness against himself. Thus Article 20(3) embodies the general principles of English and American jurisprudence that no one shall be compelled to give testimony which may expose him to prosecution for crime. The cardinal principle of criminal law which is really the bed rock of English jurisprudence is that an accused must be presumed to be innocent till the contrary is proved. It is the duty of the prosecution to prove the offence. The accused need not make any admission or statement against his own free will. The fundamental rule of criminal jurisprudence against self-incrimination has been raised to a rule of constitutional law in Article 20(3). The guarantee extends to any person accused of an offence and prohibits all kinds of compulsions to make him a witness against himself⁵.

Explaining the scope of this clause in **M.P. Sharma v. Satish Chandra**, the Supreme Court observed that this right embodies the following essentials:

1. It is a right pertaining to a person who is “accused of an offence.”
2. It is a protection against “compulsion to be a witness”.
3. It is a protection against such compulsion relating to his giving evidence “against himself.”

In **Nandini Satpathy v. P.L. Dani**, the Supreme Court has considerably widened the

⁴ “Admissibility of Scientific Evidence and the Bias against Lie Detection available”, available at: www.legalservice.com

⁵ Naresh Kumar and Ved pal Singh, “Narco-Analysis test in investigation process: Law and judiciary”XIV, Part-I,MDULJ 115(2009).

⁶ B.R. Sharma, *Forensic Science in Criminal Investigation and Trial* 7(Universal Law Publishing Co., New Delhi, 2011).

scope of clause (3) of Article 20. The Court has held that the prohibitive scope of Article 20(3) goes back to the stage of police interrogation not commencing in court only. It extends to, and protects the accused in regard to other offences-pending or imminent, which may deter him from voluntary disclosure. The phrase 'compelled testimony' 'must be read as evidence procured not merely by physical threats or violence but by psychic (mental) torture, atmospheric pressure, environmental coercion, tiring interrogatives, proximity, overbearing and intimidatory methods and the like. Thus, compelled testimony is not limited to physical torture or coercion, but extend also to techniques of psychological interrogation which cause mental torture in a person subject to such interrogation.

Right to silence is also available to accused of a criminal offence. Right to silence is a principle of common law and it means that normally courts tribunal of fact should not be invited or encouraged to conclude, by parties or prosecutors that a suspect or an accused is guilty merely because he has refused to respond to question put to him by the police or by the Courts. The prohibition of medical or scientific experimentation without free consent is one of the human rights of the accused⁶.

In case of **Smt. Selvi & Ors. v. State of Karnataka & Ors**, wherein the question was- Whether involuntary administration of scientific techniques namely Narcoanalysis, Polygraph (lie Detector) test and Brain Electrical Activation Profile (BEAP) test violates the 'right against self-incrimination' enumerated in Article 20(3) of the Constitution. In answer, it was held that it is also a reasonable restriction on 'personal liberty' as understood in the context of Article 21 of the Constitution. Following observations were made in this landmark case:

- (1) No individual should be forcibly subjected to any of the techniques in question, whether in the context of investigation in criminal cases or otherwise. Doing so would amount to an unwarranted intrusion into personal liberty.
- (2) Section 53, 53-A and 54 of Criminal Procedure Code permits the examination include examination of blood, blood-stains, semen swabs in case of sexual offences, sputum and sweat, hair samples and finger nail dipping by the use of modern and scientific techniques including DNA profiling. But the scientific tests such as Polygraph test, Narcoanalysis and BEAF do not come within the purview of said provisions.
- (3) It would be unjustified intrusion into mental privacy of individual and also amount to cruel, inhuman or degrading treatment.

Voluntary administration of impugned techniques are, however, permissible subject following safeguards, but test results by themselves cannot be admitted in evidence.

- (4) No Lie Detector Tests should be administered except on the basis of consent of the accused. An option should be given to the accused whether he wishes to avail such test.
- (5) If the accused volunteers for a Lie Detector Test, he should be given access to a lawyer and the physical, emotional and legal implication of such a test should be explained to him by the police and his lawyer.
- (6) The consent should be recorded before a Judicial Magistrate.
- (7) During the hearing before the Magistrate, the person alleged to have agreed should be duly represented by a lawyer.
- (8) At the hearing, the person in question should also be told in clear terms that the statement that is made shall not be a 'confessional' statement to the Magistrate but will have the status of a

statement made to the police.

(9) The Magistrate shall consider all factors relating to the detention including the length of detention and the nature of the interrogation.

(10) The actual recording of the Lie Detector Test shall be done by an independent agency (such as a hospital) and conducted in the presence of a lawyer.

(11) A full medical and factual narration of the manner of the information received must be taken on record.

The underlying rationale of right against self incrimination is as under

(i) The purpose of the 'rule against involuntary confessions' is to ensure that the testimony considered during trial is reliable. The premise is that involuntary statements are more likely to mislead the judge and the prosecutor, thereby resulting in a miscarriage of justice.

(ii) The right against self-incrimination' is a vital safeguard against torture and other 'third-degree methods' that could be used to elicit information.

(iii) The exclusion of compelled testimony is important, otherwise the investigators will be more inclined to extract information through such compulsion as a matter of course. The frequent reliance on such 'short-cuts' will compromise the diligence required for conducting meaningful investigations.

(iv) During trial stage the onus is on the prosecution to prove the charges leveled against the defendant and the 'right against self-incrimination' is a vital protection to ensure that the prosecution discharges the said onus.

In **Dinesh Dalmia v. State**, it has been held that scientific tests are a response to the objections that human rights are violated by the use of various kinds of third-degree methods, and that these scientific tests do not involve testimonial compulsion. This observation is diametrically opposite to the stand taken by a school of academicians and activists who believe that such scientific tests, in particular narco-analysis, meet the criteria required to constitute *torture*, as defined by the United Nations (UN). However, it is notable that while the UN definition and the opinion of the activists regards the pain or suffering inflicted as *severe*, the Bombay High Court in Abdul Karim Telgi's case has held that it is only *minimal*⁷.

In **State of Bombay v. Kathi Kalu Oghad**, where a question in issue was whether compulsorily providing a handwriting specimen, if so directed by the Court, violated the protection under Art.20(3). The Court held that the phrase 'to be a witness' in respect of *oral evidence* means *imparting* knowledge in respect of relevant facts by a person who has personal knowledge of the facts,¹⁰³ and that handwriting specimens, even if compelled to be produced, would just be the case of a general submission being made to the court. However, in the case of the narco-analysis test, the facts specifically required are extracted directly in the form of statements of the accused by way of audio and video recording. The brain mapping and lie-detection tests lie somewhere in the middle; while they only indicate the factum of concealment and not the exact information that is being concealed, the use of these tests in interrogation, by

⁷ Constitutional Validity of Narco-Analysis Test under Article 20(3) of the Constitution of India with reference to Judicial Pronouncements available at <http://www.oijrj.org/oijrj/March2014-special-issue/54.pdf>

giving little or no leeway, *is primarily aimed* at extracting the exact and specific information being concealed. Corroboration of this reasoning is found in the Supreme Court's opinion stating that while a mandatory compliance of a summon to produce a document by the accused in a criminal proceeding may amount to self-incrimination, a general search warrant directed at a police officer does not. Thus an analogy of these tests with handwriting specimens cannot be drawn and they should face the bar as provided by Article 20(3).

In **Kanti Devi v Poshi Ram** the court gave priority to social parentage over biological parentage and rejected DNA evidence by observing that though the result of DNA test is said to be scientifically accurate; it is not enough to escape from conclusiveness of Section 112 of Indian Evidence Act of 1872.

Again in case of **Sharda v Dharam Pal** the Supreme Court took a very positive view regarding the importance as well as admissibility of DNA evidence in matrimonial cases. In this case, the Supreme Court held that a Matrimonial court has the power to order a person to undergo medical test and this would not amount to violation of Article 21 of the Constitution. In case of refusal to undergo test, the court would be entitled to draw an adverse inference against him. The Delhi High Court has also adopted the same view in **Mrs. Kanchan Bedi v Gurpreet Singh** where the parentage of infant was in question and the application filed by the mother was opposed by the father for conducting DNA test. The court held that, "It appears for me to be difficult to resist that the law as it presently stands, does not contemplate any impediment or violation of rights in directing persons to submit themselves for DNA test, especially where the parentage of a child is in controversy for the grant of maintenance⁸."

EVIDENTIARY VALUE OF SCIENTIFIC METHODS

The cases concerning the validity of scientific tests present an opportunity for crystallizing the boundaries of the right to privacy in the light of scientific and technological advancements. The scientific tests have not been challenged on the ground of violation of the right to privacy. They have been challenged largely on the ground of violation of the protection against self-incrimination under Article 20 (3), and in some cases on the ground of violation of Article 21, where the rights alleged to have been violated are the Right to Liberty (in the context of a forced movement of the accused to different parts of India to carry out the tests), and the Right to Health. It has been stated, however, that the lie-detector does not directly invade the body, and that the brain-mapping test involves no direct violation of the body in the real sense of the term, but merely *touching* the physique of the person. However, the opinion was restricted to a contention that the tests involve *invasion* of the body and are violative of Article 20(3) by being *compulsive*, and not the right to privacy under Article 21. Nevertheless, courts have given their opinion on whether the right to privacy would be violated by the administration of scientific tests in cases where the challenge was not on that ground, which may be treated as *obiter*. It has been opined that the right to privacy is not violated based on the ground that it is not an absolute right, and that it is the statutory duty of every witness who has knowledge of the commission of the crime to assist the State in gathering evidence on it. However, a citizen cannot be placed under statutory duty which results in the violation of a fundamental right. While we agree that the right

⁸Nikhil Gurnani, "Exclusion of DNA test under Section 112 of the Indian Evidence Act 1872: A senseless or a meaningful exclusion 117 CriLJ 115(2001).

⁸Dr. A.K. Srivastava "DNA Testing and Human Rights Implication in Civil and Criminal Investigation" 4CrLJ81 (April, 2007).

to privacy is not absolute, we are of the opinion that it is possible that the right may be violated by the unregulated administration of scientific tests in certain cases, say, to extract personal information. Like in the case of right to life, a procedure established by law in terms of Article 21 which is fair just and reasonable may curtail the *substantive exercise of the right*. For example, restrictions upon the right to privacy as laid.

CONCLUSION

The legal system should imbibe developments and advances that take place in science as long as they do not violate fundamental legal principles and are for the good of the society. The criminal justice system should be based on just and equitable principles. The issue of using narco analysis tests and other Polygraph & Brain mapping as the tools for interrogation in India has been widely debated. The extent to which it is accepted in our legal system and out society is something, which will be clearer in the near future. In a situation where these DDTS are gaining judicial acceptances & supports despite being an “Unreliable & Doubtful” science, we have to seriously rethink about its legal & constitutional validity from “Human Rights Perspective.”

There have been orders of High Court & Upholding the validity of these scientific crime detection methods. These judgments are in stark contrast with the earlier judgments of the Supreme Court interpreting Art 20(3), Art 21 & Art 19. The veracity lies in the scientific methods of investigation is still a nascent interrogation techniques in the Indian criminal justice system without any rules or guidelines they have been orders of various High Court Upholding the validity of narco analysis, polygraph & brain mapping. These judgments are in stark contrast with the earlier judgments of the Supreme Court interpreting articles 20(3), Art 19 & Art 21. The central government must make a clear policy, stand on “Scientific Crime detection methods because what is at stake is India’s commitment to individual freedoms and a clean “Criminal Justice Systems”.

LAW MANTRA
www.lawmantra.co.in