



# ‘How far practical?’ A study of multi dimensional constraints in use of DNA Technology in investigation of sexual offences in India<sup>1</sup>

DR. NAMITA SINGH MALIK, ASSOCIATE PROFESSOR, SCHOOL OF LAW, GALGOTIAS UNIVERSITY, UP, INDIA,

## ABSTRACT

Despite the potential value of DNA evidence to resolve cases of sexual offences, DNA has very limited influence during such investigations. The prosecution of sexual offences is shaped by multi dimensional factors that restrict the path of justice delivery system. As a society for varied reasons we have very limited understanding of use of forensic evidence and its impact on case outcomes. In a country like India sexual offences are quieten down, criminal masculinity lies in putting down women. It is ironically surprising that many times women are treated as living trophies of the entire family. They carry on their shoulder the heap of family honour and a single dent on the chastity of such women is considered as a dent to the entire family. In such situation more than an offence against her body where she should be having the ultimate say to report and cooperate in investigation, she is being pulled back by several social and psychological factors to surrender the battle in between.

This research paper appreciates the role and effectiveness of using DNA technology in timely resolution of cases of sexual offence. It also examines the multi dimensional factors such as social, psychological constraints with victim and her family which discourages them to promptly report and cooperate in investigation of such offences. This paper also discusses other practical reasons lack of which DNA technology is not exhaustively used in investigation of sexual offences. At last, the study concludes with the required measures in making DNA Technology a practical instrument in investigation of sexual offences.

**KEYWORDS:** *DNA Technology, Constraints, Sexual Offences, Investigation, Practicality.*

## INTRODUCTION

DNA is the abbreviation of Deoxyribo Nucleic Acid. It's a basic genetic material in all human body cells. It's present in white corpuscles and not in red corpuscles. DNA structure determines human character, behaviour and body characteristics. The structure of DNA varies from personality to personality. Each individual has a unique.

DNA profiling (earlier called DNA fingerprinting) was introduced in 1984 by British geneticist Alec Jeffrey. It was first used in catching and convicting Coin Pitchfork who raped and murdered two girls, one in 1983 and another in 1987. Since then, the science of DNA profiling has undergone developments and it will continue to do so in the future.

Deoxyribonucleic Acid (DNA) is increasingly becoming vital to ensure accuracy and fairness in the Criminal Justice System. DNA can be used to solve crimes in several ways. DNA profile generated from exhibits from crime scene can be matched with DNA profile of suspects to either exclude the innocent or fox culpability of offender. Suspects can be traced by matching the DNA profiles of the crime exhibits with the profiles in the offenders DNA data bank

DNA analysis, also called DNA typing or DNA profiling, examines DNA found in physical evidence such as blood, hair, and semen, and determines whether it can be matched to DNA taken from specific individuals. DNA analysis has become a common form of evidence in criminal trials majorly in cases of homicide, sexual offences as well as in civil cases of paternity disputes etc.

The role of DNA in criminal justice system has expanded beyond imagination of a century old experts. The legal system widely recognizes the role of DNA and other forensic evidence in the trial of criminal offenders. This is because when scientific techniques and methods are used, there is not much scope for bias or injustice. That is why DNA profiling and a host of other forensic evidence are widely accepted in courts across the world.

DNA has the potential to play an inevitable role in investigation of sexual offences . but due to several physical, social and psychological constraints with victim it has a very limited use. It has been observed that many times in cases of sexual assault, rape etc, matter is not reported in time to the police due to social and psychological barrier with victim and her family. It's sad to see but in India, rape is considered not only as an offence against the body of victim, but it is considered as an attempt to stigmatise the whole family.

**Objective of the Paper:** This Research paper aims to discuss procedural hurdles and multi dimensional constraints because of which DNA technology is not exhaustively used in investigation of sexual offences in India.

## **DNA VIS- A-VIS CONSTITUTIONAL AND OTHER STATUTORY LAWS IN INDIA**

The Constitution of India by Article **51A (h) and (j)** commands-

*that it shall be the fundamental duty of every citizen of India —to develop the scientific temper, humanism and the spirit of enquiry and reform and strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavor and achievements.*

Though there is no specific DNA legislation enacted in India, sections 53 and 54 of the Code of Criminal Procedure, 1973 (Cr PC) provide for DNA tests implied and they are extensively used in determining complex criminal cases.

**Section 53** deals with examination of the accused by medical practitioner at the request of police officer if there are reasonable grounds to believe that an examination of his person will afford evidence as to the commission of the offence.

**Section 54** of Cr.P.C. further provides for the examination of the arrested person by the registered medical practitioner at the request of the arrested person.

By the Amendment Act of 2005, the Cr.P.C. was amended *inter alia* to add new **section 53-A** which mandates the examination of a person accused of rape by a medical practitioner.

By this amendment, new explanation includes within its ambit examination of blood, blood stains. Semen, sputum, swabs, sweat, hair samples and finger nails by the use of modern techniques in the case of sexual offences including DNA profiling and such other tests which is necessary in a particular case. Though section 53-A refers only to examination of the accused by medical practitioner at the request of the police officer, the court has wider power for the purpose of doing justice in criminal cases, by issuing direction to the police officer to collect blood samples from the accused and conduct DNA test for the purpose of further investigation under sections 173(8) and 293(4)(e) of the Cr PC.

It should be noted that the Explanation to Sections 53, 53A and 54 of the Code of Criminal Procedure, 1973 was amended in 2005 to clarify the scope of medical examination of the accused, especially with regard to the extraction of bodily substances, and in particular to use of DNA Profile technique.

Apart from these provisions, **section 45 of the Indian Evidence Act, 1872** is more important so far as the admissibility of DNA evidence is concerned. Section 45 deals with the opinion of the expert.

*Section-164 A of Criminal procedure code.- Medical examination of the victim of rape:*

Medical examination of the victim of rape.— (1) Where, during the stage when an offence of committing rape or attempt to commit rape is under investigation, it is proposed to get the person of the woman with whom rape is alleged or attempted to have been committed or attempted, examined by a medical expert, such examination shall be conducted by a registered medical practitioner employed in a hospital run by the Government or a local authority and in the absence of a such a practitioner, by any other registered medical practitioner, with the consent of such woman or of a person competent to give such consent on her behalf and such woman shall be sent to such registered medical practitioner within twenty-four hours from the time of receiving the information relating to the commission of such offence

## APPLICATION & ADMISSIBILITY OF DNA IN SEXUAL OFFENCES

Coming to the application in criminal cases, DNA tests can be effectively used in criminal cases for the following purpose. First, it assists in positively identifying the perpetrators of crime, particularly in cases of sexual assault and homicide where identification is often a central issue. Second, to identify the remains of victims of violent crimes. The most suitable application of DNA tests for these purposes is evident in two popular cases namely, *Santosh Kumar Singh v. State* (establishing commission of rape by the appellant) and *Surendra Koli v State of U.P* (to identify dead bodies of victims).

In *Krishna Kumar Malik v State of Haryana*, the Supreme Court in a rape case observed, —Now, after the incorporation of Section 53 (A) in the Criminal Procedure Code, w.e.f. 23.06.2006, brought to our notice by learned counsel for the Respondent-State, it has become necessary for the prosecution to go in for DNA test in such type of cases, facilitating the prosecution to prove its case against the accused. Prior to 2006, even without the aforesaid specific provision in the Cr.P.C. prosecution could have still resorted to this procedure of getting the DNA test or analysis and matching of semen of the Appellant with that found on the undergarments of the prosecutrix to make it a fool proof case.

## PRACTICAL ISSUES GOVERNING USE OF DNA TECHNOLOGY IN SEXUAL OFFENCES

There is no specific legislation which is present in India which can provide specific guidelines to the investigating agencies and the court, and the procedure to be adopted in the case of sexual offences involving DNA as its evidence. The evidence law and criminal procedure code doesn't detail out the procedure for admissibility of DNA in criminal justice system. Moreover, there is no specific provision under Indian Evidence Act, 1872 and Code of Criminal Procedure, 1973 to manage science, technology and forensic science.

Especially with reference to the amendment of Cr. P. C. by the Cr. P. C. (Amendment) Act, 2005 has brought two new sections which authorize the investigating officer to collect DNA sample from the body of the accused and the victim with the help of medical practitioner. These sections allow examination of person accused of rape by medical practitioner and the medical examination of the rape victim respectively. But the admissibility of these evidences has remained in a state of doubt.

Another issues is that the opinion of the Supreme Court and various High Courts in various decisions remained conflicting. Judges do not deny the scientific accuracy and conclusiveness of DNA testing, but in some cases they do not admit these evidences on the ground of legal or constitutional prohibition and sometimes the public policy. At present in India there is no concrete law to govern issues of admissibility of forensic technique. Some sections i.e. Sections 53, 54, 53(A), 164(A) of Code of Criminal procedure govern science and technology issue to certain extend. Therefore it is completely left on judicial discretion either to permit DNA test or to deny any such request. Such a condition creates confusion and uncertainty over subordinate judiciary.

## EFFECT OF DELAYED AND EARLY EXAMINATION OF VICTIM & CRIME SCENE IN SEXUAL OFFENCES

Sexual offence may be reported to the police or may not be reported. Those which are reported to the police may be reported in presence of the victims or in their absence. Some incidences of sexual offence are reported to the police in absence of victims.

### *Effect of Delayed Medical Examination:*

- Evidence lost due to delay.
- Conviction rate decreases.
- Faith in justice delivery system decreases.
- Early case reporting decreases due to lack of faith in system.

### *Effect of Early Medical Examination:*

- Vital evidence is collected.
- Conviction rate increases.
- Faith in justice delivery system increases.
- Early Case reporting increases due to trust in legal system.

## MULTI DIMENSIONAL CONSTRAINTS TO USE OF DNA TECHNOLOGY IN SEXUAL OFFENCES IN INDIA

In a country like India, where sexuality itself is a taboo and women are considered as living trophies of the entire patriarchal family, they carry on their shoulder baggage of honour. Sadly many times rape and other sexual offences are not reported to the police due to several social, physical and psychological constraints. Such constraints are:

1. **Social constraints:** questions as to chastity of women, honour and prestige of family, sensitive relationship between victim and offender of sexual offence, age and marital status of victim are the prime constraints as to why the case is not even reported at all. In such situation when the matter is not reported DNA technology practically fails to resolve such cases of violence.
2. **Physical constraints:** when ever police station is located at a good distance from the place of incidence, conveyance issue with the victim, lack of legal awareness, basic education and information to access the rescue team are the prime reasons for late reporting of crime. Secondly when the crime is reported late, crime scene evidences are lost, therefore DNA technology couldn't contribute much in investigation of offences.
3. **Psychological constraints:** psychological effect of crime on victim, relationship issues, hesitance and fear of victim at time when cooperation is required in collecting samples for victims body etc also makes it difficult to practically use DNA technology in investigation of sexual offences.
4. **Lack of forensic labs:** Due to several social, psychological and physical constraints many times the required samples and forensic evidence reaches very late in forensic lab. Further, a serious concern is also about the independence of forensic labs and its self-regulation. The state and central forensic science laboratories are under the direct administrative control of the law enforcement authorities. The State and Union Territory Forensic Science Laboratories is either directly functioning under the respective Home Department or through police establishments. Forensic science institutions are part of police setup and

therefore, cannot maintain absolute independence at all levels. Forensic labs lack the necessary manpower and infrastructure. They are staff served. Sometimes proper infrastructure and equipments are missing. They lack proper funding also. Surprisingly, there is also a lack of co-ordination between these two wings, i.e. forensic expert and police.

5. ***Lack of trained forensic experts and doctors:*** As Forensic science is a new domain and the interface of law and forensic is bit technical, we don't have trained forensic experts and doctors across country who can play major role in investigation of cases.
6. ***Constraints faced by allied subsidiaries, such as Police & other investigative agencies:*** Modern techniques of investigation are an area still unknown to the police. They are not taught about them. The police are accused of investigating crimes by using traditional methods and techniques. It has been maintained that improper scientific knowledge with the investigation officer, the first respondent to the crime coupled with improper handling of scene of crime, may either contaminate the samples required to be tested or destroy the evidentiary value, which could be obtained on proper lifting, sealing, forwarding to the Expert/Laboratory for examination. Therefore, association of Forensic Experts with the police investigation right from the beginning and their effective liaison with the Medico-legal Expert can contribute very significantly and sometime decisively, to the solving of the crime.

## CONCLUSION:

Legislators should take necessary step to legislate a uniform and national level law on conducting DNA tests and its admissibility in court rooms. Because in absence of statutory recognition a situation of confusion and uncertainty prevails over investigating agencies and subordinate judiciary. More well-equipped laboratories should be established to handle DNA samples and evidence. Labs should adhere to high quality standard; regularly participate in proficiency test, use of splitting method and uniform standard for DNA testing be adopted.

India need to have trained professional forensic experts who specialise in use of DNA technology and can contribute very effectively in investigation of sexual offences. Police personnel should be sensitised and trained to handle with great care and caution investigation of sexual offences. Proper training is provided to investigating agencies to overcome contamination issue. Proper chain of custody should be maintained. Proper training and sensitization of legal fraternity is required so as to overcome issues like prosecutor's fallacy.

Last but not the least, society need to develop an open, sensitive but rational and empathetic temperament towards victim of sexual acts. They should not be looked down and stigmatised. The family of victim should not hesitate to report such crimes in the interest of justice. Rather, as a nation we shall try our best to develop a crime free society wherein there is no place for violence and discrimination against anyone.

**REFERENCES:**

1. Dr. Indrani Das, Dr. Kanad Bag, Dr. Arup Chakraborty, Prof. S. Batabyal, "The cause and duration of delay in medical examination of victims of sexual offence in a tertiary care setting of a metro city in India", *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)* e-ISSN: 2279-0853, p-ISSN: 2279-0861. Volume 16, Issue 11 Ver. IX(Nov. 2017), PP 01-04. [www.iosrjournals.org](http://www.iosrjournals.org)
2. Dr. Nirpat Patel, Vidhwansh K Gautaman, ShyamSundar Jangir The Role of DNA in Criminal Investigation – Admissibility in Indian Legal System and Future Perspectives, *International Journal of Humanities and Social Science Invention* ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714 [www.ijhssi.org](http://www.ijhssi.org) Volume 2 Issue 7|| July 2013|| PP. 15-21
3. Sanmiha, A STUDY ON ROLE OF DNA TECHNOLOGY IN CRIMINAL INVESTIGATION, *International Journal of Pure and Applied Mathematics* Volume 120 No. 5 2018, 4433-4453 ISSN: 1314-3395 (on-line version)
4. Chakraborty, Manisha & Dr. Dube: applicability of forensic science in criminal justice system in India.
5. James Vadackumchery, *The Police, the Court, and Injustice*, 97 (APH Publishing Corporation, New Delhi, 1997).
6. The forensic use of bio-information: ethical issues, Nuffield Council on Bioethics, <http://nuffieldbioethics.org/wpcontent/uploads/The-forensic-use-of-bioinformation-ethical-issues.pdf> (last visited on 12.7.19)
7. V. R. Dinkar, 'Forensic Scientific Evidence: Problems and Pitfalls in India', 79-84, *IJFSP* Vol. 3 (2015).
8. Peerzada Yasir Latif Handoo, *Forensic Science: A Boon to Criminal Justice, Administration with Special Reference to State of J&K*, 53 *JIARM* Vol.1 (2013).
9. Report of the Committee on Draft National Policy on Criminal Justice, Ministry of Home Affairs, Government of India, July, 2007.
10. Report of the Committee on Amendments to Criminal Law, 23 rd January, 2013.