



DNA PROFILING WITH SPECIAL REFERENCE TO SUPREME COURT GUIDELINES

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ABSTRACT

Forensic science, as a scientific discipline functioning within the parameters of the legal system not only provides guidance in criminal and civil investigation but also supplies the courts accurate information about all the attending features of identification of criminals. Actually, the recent advancement in modern biological research has revolutionized forensic science resulting in a radical impact on the administration of justice. In the new scientific era, the emergence of DNA testing changes the role of forensic science in the legal system from passive spectator to the main key player. There is no doubt that this new technology can be used as an effective tool in crime detection to accelerate crime control for a better society. But at the same time we cannot overlook the fault that it cannot be implemented in any legal system without hampering some basic human rights of an all used like right against self-incrimination, right of privacy etc. Therefore, the problem, that the law makers and the judges would face in introducing this technology is how to make a susceptible behave between the above two conflicting interest at the society. This paper concerns with the importance and relevance of this technology in forensic science as well as criminal justice system.

INTRODUCTION

The correct identification of criminals and other individuals has always been one of the most important problems in criminal and civil investigation. The best and certain method, so far, had been the identification through fingerprints. This identification mode was discovered during the nineteenth century. It has been helping the criminal justice system tremendously wherever individuals from all body materials containing cells. This made, excess the other method of identification in certain respects. It permits the identification of the individual not only from the comparison of his own body materials containing body cells inter se, but the identification of his body materials can also be made from the body cells of his blood relations: parents, sons, daughters, brothers, sisters and the like.

The identification is possible from a variety of clues, which are available in different types of crime blood, semen, hair roots, body tissues, bone marrow etc. They can be inches to the source (the cut print or the victim) from which they emanated. In **Naina Sahni's Tandoor Murder case** the body after the murder was being burnt in an oven Tandoor. When people suspected foul plans and stopped the burning, a badly burnt body was taken out. The body material was too much charred to permit in use in the DNA test. Bone marrow was used to identify the victim. Its DNA profile was compared to those of her parents and identity was established (CH).

The IO interrogates, on behalf of the court, witnesses including the all used and



the suspects to find out the truth. Since long the police have been all used of adopting shortcut methods in interrogation thereby violating human rights by using coercive means to extract information. The scientific evidence brings fairness in investigation and helps in corroborating other evidence during trial. Forensic evidence¹ as secondary evidence, corroborates the primary evidence and helps judiciary in delivering the justice². The judiciary since long has been placing high reliance on scientific evidence as observed in mid 16th century by justice sanders, “it matters arise in one land which concerns others Sciences or faculties, we conventionally apply for the aid of that science or faculty which it concerns. This an honourable commendable thing in one law. We approve of them our encourage them as things working of commendation”³. Since 1897, India is using finger prints for classification of the records of criminals⁴. In pursuits of truth, Indian judiciary is using forensic evidences like finger prints, post mortem reports by medical experts, serology, toxicology, odontology, ballistics, DNA profiling etc. Recent times have witnessed a spurt in the use of modern forensic techniques for deception detection like narro-analysis, brain mapping and lie detector for helping judiciary in reaching the truth in delivery of justice.

DNA profile database can be useful

tools in solving crime, but given that DNA profile of a person can reveals very personal information about the individual, including medical history, family history and so on, a move comprehensive legislation regulating the collection, us analysis and storage of DNA samples needs included in the draft human DNA profiling bill.

DNA evidence was first accepted by the courts in India in 1985⁵ and in 2005 the code of criminal procedure was amended to allow for medical practitioners, after authorization from a police officer who is not below the rank of sub-inspector, to examine a person arrested on the charge of committing an offence and with the reasonable grounds that an examination of the individual will bring to light evidence regarding the offence. This can include “the examination of blood, blood stains, semens, swabs in case of sexual offences sputum and sweat, hair samples, and finger nail clippings, by the use of modern and scientific techniques including DNA profiling and such other tests which the registered medical practitioner thinks necessary in a particular case”⁶.

Though this provision establishes that authorization is needed for collection of DNA samples, defines who can collect samples, creates permitted circumstances for collection, and lists material that can be

¹ Forensic or scientific evidence is a physical evidence derives from forensic analysis. Forensic science is the ad mixture of act and science to facilitate the process of investigation.

²Jitendra N. Bhatia, “A profile of Forensic Science” (2003) 8 Sci (Jour) 25.

³Buckly V Rice Thomas (1554) 1 Plowden 118.

⁴Nivedita Grover and IshaTyagi, “Development of Forensic Science and Criminal Prosecution-India”, 4(12) Int. J. Sc. Res. Pub 1-7 (2014).

⁵ Law commission of India, review of the Indian Evidence Act 1872 Pg 43. Available at <http://larscommissionofindia.nic.in/> 185th report-part II pvt. Last accessed on October 3rd, 2017.

⁶ Section 53. The criminal code of procedure 1973. Available at: <http://www.vakilvol.com/barracts/crpc/553.htm>. Last accessed on October 3rd, 2017



collected among others things, it does not address now the collected DNA evidence should be handled, and what will happen to the evidence after it is collected and analyzed. These gaps in the provision indicate the need for a more comprehensive legislation regulating the collection, use, analysis and storage of DNA samples, including for crime-related purposes in India.

In 2007, the draft of human DNA profiling bill was made public but was never introduced in parliament in February 2012, a new version of the bill was leaked. It passed, the bill will establish state-level DNA databases which will feed into a national level DNA database and proposes to regulate the use of DNA for the purposes of “enhancing protection of people in the society and the administration of justice”⁷.

The Bill will also establish a DNA profiling Board responsible for 24 functions, including specifying the list of instances for human DNA profiling and the sources of collection, enumerating guidelines for storage and destruction of biological samples, and laying down standards and procedures for establishment and functioning of DNA laboratories and DNA Data Bank.⁸ The lack of harmonization and clear policy indicates that there is a need in India for standardizing the collection and use of DNA samples. Although DNA evidence can be useful for solving crimes, the current draft 2012 draft bill is missing critical safeguards and technical standards essential to prevent the misuse of DNA and protecting individual rights.

Order of the Court for DNA test

The issue of taking biological sample of the subject is a vital issue on Forensic analysis since it may affect privacy or invade bodily integrity of a person resulting in compromising with the rights to life with dignity. Under some forensic techniques like narco analysis the statements of the subject are recorded under the influence of the drug administered to them taking them to a trans-state for allegedly recording compulsive testimony such statement although not admissible in the court, still violate right against self incrimination under Article 20(3) of the constitution of India. Hence, the **supreme court of india in Selvi v State of Karnataka (Selvi)**⁹ has made it compulsory to get the consent of the subject prior to conducting of such Forensic tests.

Thus in the interest of justice, the court must have balancing approach in individuals right and community right in ordering a forensic test. The law under section 53 CrPc empowers the criminal courts to use reasonably necessary force to conduct forensic examination. Further, to prove innocence section 54 of CrPC provides an opportunity to the accused to offer medical examination. In civil disputes, free and informal consent has greater relevance. In **Rohit Shekhar v Narayan Dutt Tiwari**¹⁰, however, the court ordered for use of appropriate force to take the blood sample.

Consent Issue

⁷ Draft Human DNA Profiling Bill 2012 introduction.

⁸ Id Section 12(9-2)

⁹ (201) 7 SCC 263

¹⁰ ILR (2010) supp. (3) Del. 573



In civil dispute competent consent¹¹ of the subject before conducting forensic tests have been advocated by the Supreme Court in Selvi case.

Admissibility of DNA evidence in paternity dispute cases in India In our country initially the judges took very conservative views regarding the applicability of DNA evidence in resolving the paternity/maternity dispute cases. Indian judges often face a database question in deciding matters of paternal responsibility of whether the law should give priority to biological parentage over social parentage or not.

To determine the parentage of the child there is a statutory presumption under section 112 of the Evidence Act that any child born during the continuance of a valid marriage between his/her mother and any man, or within two hundred and eighty days after its dissolution, the mother remaining unmarried, shall be conclusive proof that he is the legitimate child of that man, unless it can be shown that the parties had no access to each other at any time when that child could have been begotten. Now, DNA testing may be used to rebut the said statutory presumption arising under the Act, or to establish evidence in the circumstances. Where no presumption arises one may seek DNA parentage testing in order to obtain evidence of non-paternity for the purpose of civil proceedings against the child and mother to prove the paternity fraud and claim damages for emotional stress and financial loss that was caused due to such

¹¹ The competent consent includes informed consent i.e. information about health effects at the test on person and the consequences in the matter under inquiry.

fraud. DNA parentage testing may provide evidence to show that a person has biological connection with a deceased person and can be a proof in support of a succession claim.¹²

In **Gautam Kundu v State of W.B.**¹³ the supreme court expressed the most reluctant attitude in the application of DNA evidence in resolving the paternity dispute arising out of a maintenance proceeding. In the said case, the father disputed paternity and demanded blood grouping test to determine paternity for the purpose of deciding whether a child is entitled to get maintenance under section 125 of the code of criminal procedure from him. In this context, the supreme court held that where purpose of the application was nothing more than to avoid payment of maintenance, without making out any ground whatever to have recognize to the test, the application for blood test could not be accepted. It was also held that no person could be compelled to give sample at blood for analysis against his/her will and no adverse inference can be drawn against him/her for such refused.

In a judgment of the supreme court in the year 2001, **Kanti Devi v Poshi Ram**¹⁴, the court gave priority to social parentage over biological parentage and thereby rejected DNA evidence by observing that though the result of a genuine DNA test is said to be scientifically accurate it is not enough to escape from the conclusiveness of section 112 of the Indian

¹² S.K. Verma and G.K. Goswami, "DNA profiling: current perspective and future challenges in India", 241 Forensic Science Int. 183-189 (2014).

¹³ 1993 AIR 2295; 1993 SCR(3) 917.

¹⁴ (2001) 5 SCC 311



Evidence Act, 1872.

The supreme court in **Diparwala Roy v Ronobvoto Roy**¹⁵ to uphold the decision of family court and the high court allowing DNA test for determining not only the paternity of new born child but also to conclusively testing the veracity of accusations of infidelity leveled by the husband in the divorce petition filed in the family court under section 13 of the Hindu Marriage Act 1955. The apex court was, therefore, firm in holding that proof based on DNA test would be sufficient to dislodge a presumption under section 112 of the Indian Evidence Act.

In **Sharda v Dharmpal**¹⁶ the supreme court took a very positive view regarding importance as well as admissibility of DNA evidence in matrimonial cases. The supreme court observed that:

- (1) A matrimonial court has the power to order a person to undergo medical test.
- (2) Passing of such an order by the court would not be in violation of the right to personal liberty under Article 21 of the Indian constitution.
- (3) However the court should exercise such a power if the applicant has a strong prime farie case and there is sufficient material before the court if despite the order of the court, the respondent refuses to submit himself to medical examination, the court will be entitled to draw an adverse inference against him.

In the aforesaid case the supreme court by distinguishing its earlier decision in

GoutamKundu case¹⁷ further held that right to privacy under article 21 of the constitution is not an absolute right and in case of conflict between the fundamental rights of two parties, the court has to strike balance between the competing rights.

However DNA has played vital role in strengthening rights of unmarried mother and her child especially those belonging to marginalized sections of society who suffered exploitation under various compelling circumstances including deceitful promise¹⁸ of marriage. In **Narayan Dutt Tiwari v Rohit Shekhar** DNA test was very helpful for Rohit Shekhar to enjoy the legal variation of being the legitimate son of Narayan DuttTiwari. In this case, Rohit Shekhar has claimed to be the biological son of N.D. Tiwari, but N.D. Tiwari is reluctant to undergo such test stating that it would be violation of his right to privacy and would cause him public humiliation. But supreme court rejected this point stating when the result of the test would not be revealed to anyone and it would be under a sealed envelope, there is no point of getting humiliated. Supreme court further stated that we want young man to get justice, he should not left without any remedy. It would be very interesting to see that now courts in India would allow the admissibility of DNA technology in future.

DNA Analysis in Criminal Investigation

The introduction of DNA technology has posed serious challenge to some legal and fundamental rights of an individual such as “Right to Privacy” “Right against self-

¹⁵ 2014 SCC online SC 831: (2015) ISCC

¹⁶ (2003) 4 SCC 493

¹⁷ 1993 AIR 2295; 1993 SCR (3) 917

¹⁸ (2012) 12 SCC 554.



intimation” and this is the most important reason why courts sometimes are reluctant in accepting the evidence based on DNA technology. Right to privacy has been included under right to life and personal liberty or Art 21 of the Indian Constitution and under Article 20(3) provides Right against self-incrimination which protects an accused person in criminal cases from providing evidences against himself or evidence which can make him guilty. But it has been held by the supreme court on various occasions that right to life and personal liberty is not an absolute right¹⁹.

In **Govind Singh v State of Madhya Pradesh**²⁰ supreme court held that a fundamental right must be subject to restriction on the basis of competing public interest. In another case **Kharak Singh v State of Uttar Pradesh**²¹ Supreme Court held that right to privacy is not a guaranteed right under our constitution. It is clear from various decision which have been delivered by the supreme court from time to time that the right to life and personal liberty which has been guaranteed under our Indian Constitution not an absolute one and it can be subject to some restriction. And it is on this basis that the constitutional of the laws right to life and personal liberty are upheld by the supreme court which includes medical examination. And it is on the basis that various courts in the country have allowed DNA technology to be used in the investigation and in producing evidence.

¹⁹ G.K. Goswami, “Fair and participatory Investigation: The New Paradigm Towards Internal Police Reforms” in Shankar Sen (ed), Police Reforms 142 (Annugua Books, New Delhi (2015))

²⁰ 1975 AIR 1378, 1975 SCR (3) 946.

²¹ 1963 AIR 1295; 1964 SCR (1) 332

In **Priyadarshini Mattoo murder case**, the trial court exonerated the accused based on allegedly broken. COC. However, in appeal the Delhi High Court awarded death penalty to santosh singh but the supreme court reduced it to life imprisonment²². In **Nitish Katara murder case** the identification of the deceased victim was difficult due to availability of only a small portion of one un-burnt palm with fingers. Here also, DNA profile helped in identifying the body remains by matching DNA profile with parents of the deceased which helped the High court of Delhi to uphold the conviction of the accused²³. DNA has helped the Indian judiciary in connecting crime with criminal and identification of the victim with precision. However integrity and chain of custody (COC)²⁴ of biological sample recovered from scene of crime remain of vital significance in proving guilt beyond reasonable doubt.

Suggestions

Following are the suggestions for legal reforming for effective application of DNA technology in India:

- (1) Section 53 of the CvPC provides some scope to the investigating officer to have the accused examined by a medical practitioner at the request of the police: This section does not specifically say whether it would

²²Santosh Kumar Singh V State through CBI (2010) 9 SCC 747.

²³ Vishal Yadav S State of U.P. (2014) SCC online Del. 1373.

²⁴ Chain of Custody (C.C.), in legal context, is & procedural protocol which represents custody trial in the form of chronological log containing details of seizure, custody, transfer, diagnostic and disposition.



be applicable for DNA test. It relates to examination of the accused by a medical practitioner. This section never contemplates that the police officer shall be entitled to collect semen, blood, saliva, hair root, urine, vaginal swab etc. for the purpose of investigation personally by himself. For the purpose of crime investigation, section 53 CrPC should be more specific, clear, more unambiguous, more meaningful and more purposeful so that an investigating officer may not face any difficulty for the purpose of crime investigation.

- (2) Article 20(3) of the constitution of India has to be reinterpreted to the effect that the accused should not get protection of this article when the investigating officer or the court direct him to give DNA sample for the purpose of investigation and if he does not give consent then an adverse inference should not be drawn against him.
- (3) The supreme court declared that the right of privacy guaranteed under article 21 of the constitution could not operate as a bar when the question of public morality and public interest will arise, but a comprehensive legislation regarding privacy law is required in our country.

Limitations of DNA Technology

In spite of the fact that the application of DNA technology in the criminal justice system is a social necessity, this new technology is not above criticism. Questions remain concerning whether DNA evidence is a threat to the right to fair trial or the right to self incrimination as guaranteed by the Indian Constitution. There are also concerns about the statistical probability critics argued that no matter how small the chance might be that two persons will have the same profile, can we convict a person on the

basis of probability? The Science may be infallible, but human action, which controls the result of the scientific forensic examination, is always and there is probability of manipulation and tempering with the scientific evidence.²⁵

Conclusion

India could benefit from having a legislation regulating, standardizing and harmonizing the use, collection, analysis and retention of DNA samples for crime-related purposes. There is a need with certain precautions of employing scientific advancements for preventing detecting crimes so there is a need to prefer harmonizing construction of protection of individual rights under art 20(3) and art 21 of the constitution for safety, security and protecting the interest of the society.

²⁵ The UK DND database our the European court and Human Rights: Lessons India can each from UK mistakes. Power Point Presentation Dr. Helen, Genewatch UK September, 2012.