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LEGAL AND ETHICAL ISSUES IN MANDATORY DNA TESTING IN MATRIMONIAL AND MAINTENANCE CASES IN INDIA: AN EMPIRICAL STUDY

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ABSTRACT

The increasing use of DNA testing in matrimonial and maintenance disputes in India has raised significant legal and ethical concerns, particularly in relation to privacy, dignity, and child welfare. While DNA testing provides a highly reliable scientific method for determining biological parentage, its compulsory application conflicts with established legal principles such as the presumption of legitimacy under the Indian Evidence Act, 1872 and the constitutional right to privacy recognized in *Justice K.S. Puttaswamy v. Union of India*¹.

This study adopts a non-doctrinal (empirical) research methodology, combining primary data collected through questionnaires from nineteen respondents with secondary legal sources, including statutes, case laws, and scholarly literature. The research analyses stakeholder perceptions regarding the reliability, necessity, and ethical implications of DNA testing in family law disputes.

The findings reveal that although DNA testing is widely accepted as a scientifically accurate tool, there is strong opposition to its mandatory use. Respondents expressed significant concerns regarding its impact on the welfare of the child, the dignity of women, and the potential misuse of such testing in matrimonial litigation, particularly in proceedings under the Code of Criminal Procedure, 1973. The study also identifies a lack of comprehensive statutory regulation, leading to inconsistency in judicial decisions.

The research concludes that mandatory DNA testing cannot be justified as a general rule and should be permitted only in exceptional circumstances, subject to strict judicial scrutiny. It emphasizes the need for a balanced legal framework that harmonizes scientific advancements with constitutional protections and ethical considerations.

Keywords: DNA Testing, Matrimonial Disputes, Maintenance, Privacy, Child Welfare, Legitimacy, Family Law

INTRODUCTION

The advancement of DNA testing has significantly influenced matrimonial and maintenance disputes in India by providing a scientifically reliable method to determine paternity. However, its increasing use raises complex legal and ethical concerns. Indian law, particularly under the Indian Evidence Act, 1872, prioritizes the presumption of legitimacy to protect children and maintain family stability, often creating a conflict with scientific truth.

The growing reliance on DNA testing in proceedings under the Code of Criminal Procedure, 1973 has led to concerns about misuse, especially as a tool to avoid maintenance or harass parties. Additionally, the recognition of the right to privacy in *Justice K.S. Puttaswamy v. Union of India*¹ has added a constitutional dimension, as compulsory DNA testing may infringe bodily autonomy and genetic privacy.

Judicial decisions, including *Goutam Kundu v. State of West Bengal*² and *Nandlal Wasudeo Badwaik v. Lata Nandlal Badwaik*³, reflect a cautious and evolving approach, allowing DNA testing only in exceptional cases. Beyond legal concerns, ethical issues such as the dignity of women, welfare of children, and social stigma remain central.

Thus, the issue requires a balanced approach that reconciles scientific truth with legal principles, constitutional rights, and social justice.

RESEARCH METHODOLOGY

The present study adopts a **non-doctrinal (empirical) research methodology**, combining both analytical and field-based approaches to examine the legal and ethical issues surrounding mandatory DNA testing in matrimonial and maintenance cases in India. The research seeks to bridge the gap between theoretical legal principles and their practical implications by incorporating primary data alongside doctrinal analysis.

The study is primarily based on the collection of **primary data through structured questionnaires**, administered to a selected group of respondents comprising advocates, legal professionals, and individuals with knowledge of matrimonial litigation. A total of nineteen respondents were surveyed using a **convenience sampling method**, owing to accessibility and time constraints. The questionnaire was designed to capture perceptions relating to the reliability of DNA testing, its impact on privacy and dignity, its implications for child welfare, and the necessity of legal regulation.

¹ *K.S. Puttaswamy v. Union of India* (2017) 10 SCC 1-AIR 2017 SC 4161

² *Goutam Kundu v. State of West Bengal* (1993) 3 SCC 418

³ *Nandlal Wasudeo Badwaik v. Lata Nandlal Badwaik* (2014) 2 SCC 576

In addition to primary data, the study relies on **secondary sources**, including statutes such as the Indian Evidence Act, 1872 and the Code of Criminal Procedure, 1973, as well as judicial decisions like Goutam Kundu v. State of West Bengal and Nandlal Wasudeo Badwaik v. Lata Nandlal Badwaik. Scholarly articles, law commission reports, and legal commentaries have also been consulted to provide a comprehensive doctrinal foundation.

The data collected through the questionnaire has been analysed using the **percentage method**, enabling the identification of trends and patterns in respondents' opinions. The findings are further interpreted through a **qualitative analytical approach**, allowing the researcher to correlate empirical results with existing legal principles and judicial interpretations. Graphical tools such as bar charts and pie diagrams have been employed to enhance clarity and facilitate better understanding of the data.

The scope of the study is limited to the examination of DNA testing in matrimonial and maintenance disputes within the Indian legal framework. The relatively small sample size and the use of non-probability sampling constitute limitations of the study, which may affect the generalizability of the findings. However, the research provides valuable insights into the socio-legal dimensions of the issue and contributes to the ongoing discourse on the need for regulatory reforms.

Thus, by integrating empirical observations with doctrinal analysis, the methodology adopted in this study ensures a balanced and comprehensive examination of the legal and ethical challenges posed by mandatory DNA testing in family law disputes.

RESEARCH HYPOTHESIS

The present study is based on the central hypothesis that **mandatory DNA testing in matrimonial and maintenance cases in India raises significant legal and ethical concerns, particularly in relation to the right to privacy, dignity, and the welfare of the child, and therefore requires strict judicial control and statutory regulation.**

It is further hypothesized that while DNA testing is widely accepted as a reliable scientific method for determining paternity, its compulsory use may conflict with the presumption of legitimacy under the Indian Evidence Act, 1872 and the constitutional right to privacy recognized in Justice K.S. Puttaswamy v. Union of India.

The study also proceeds on the assumption that the absence of a comprehensive legal framework governing DNA testing in family disputes leads to inconsistent judicial decisions and increases the possibility of misuse, particularly in maintenance proceedings under the Code of Criminal Procedure, 1973.

RESEARCH QUESTIONS

1. Whether mandatory DNA testing in matrimonial and maintenance cases violates the right to privacy and dignity under Article 21, as recognized in Justice K.S. Puttaswamy v. Union of India?
2. what extent should courts prioritize child welfare over scientific truth in disputes involving paternity and legitimacy under the Indian Evidence Act, 1872?
3. Whether DNA testing is being misused as a strategic tool in matrimonial litigation, particularly to evade maintenance obligations under the Code of Criminal Procedure, 1973?
4. Does the absence of a comprehensive statutory framework lead to inconsistent judicial approaches in ordering DNA tests in family disputes?
5. Whether a regulated and case-specific approach to DNA testing can effectively balance scientific accuracy with constitutional rights and ethical considerations?

OBJECTIVES OF THE STUDY

The present study is undertaken with the objective of critically examining the legal and ethical implications of mandatory DNA testing in matrimonial and maintenance disputes in India. It seeks to analyse both doctrinal principles and empirical perceptions to arrive at a balanced understanding of the issue.

The study aims to evaluate whether the widespread acceptance of DNA testing as a reliable scientific tool justifies its mandatory use in matrimonial litigation. It further seeks to examine the extent to which concerns relating to child welfare, as reflected in the empirical data, limit the desirability of compulsory DNA testing.

Another important objective is to analyse whether the perception that DNA testing should be used only in exceptional circumstances aligns with the legal framework under the Indian Evidence Act, 1872 and judicial precedents. The study also aims to assess the impact of DNA testing on the dignity and privacy of individuals, particularly in light of the constitutional principles laid down in Justice K.S. Puttaswamy v. Union of India.

The research further intends to investigate whether DNA testing is being misused as a strategic tool in matrimonial disputes, especially to evade maintenance obligations under the Code of Criminal Procedure, 1973. It also seeks to identify gaps in the existing legal framework and evaluate the need for statutory regulation governing DNA testing in family law disputes.

Finally, the study aims to examine whether a balanced approach can be evolved that harmonizes

scientific truth with constitutional values, ethical considerations, and the welfare of the child.

CONCEPTUAL FRAMEWORK

The conceptual framework of the present study is based on the interaction between **scientific evidence, legal principles, and ethical considerations** in the context of mandatory DNA testing in matrimonial and maintenance disputes in India. The study is grounded in the understanding that DNA testing, while scientifically accurate, operates within a legal system that is deeply influenced by social values, constitutional protections, and judicial discretion.

At the core of this framework lies the concept of **scientific truth**, represented by DNA testing as a highly reliable method for establishing biological parentage. This scientific dimension is supported by the empirical findings of the study, which demonstrate a high level of acceptance of DNA testing among respondents. However, scientific truth alone does not determine legal outcomes in family law disputes, as it must be reconciled with established legal doctrines.

The second component of the framework is the **legal presumption of legitimacy**⁴, as embodied in the Indian Evidence Act, 1872. This presumption reflects a normative commitment to protecting children from the social stigma associated with illegitimacy and maintaining the stability of family relationships. The tension between this legal presumption and scientific evidence forms a central axis of the study.

The third dimension of the framework is the **constitutional right to privacy and dignity**, which has gained prominence following its recognition in Justice K.S. Puttaswamy v. Union of India. DNA testing involves the extraction and analysis of genetic material, thereby implicating bodily autonomy and informational privacy. Any attempt to mandate such testing must therefore be justified within the constitutional framework of legality, necessity, and proportionality.

1- 'legal presumption of legitimacy' (Section 112 of Indian Evidence Act, 1872)

The third dimension of the framework is the **constitutional right to privacy and dignity**, which has gained prominence following its recognition in Justice K.S. Puttaswamy v. Union of India. DNA testing involves the extraction and analysis of genetic material, thereby implicating bodily autonomy and informational privacy. Any attempt to mandate such testing must therefore be justified within the constitutional framework of legality, necessity, and proportionality.

The fourth component is the **ethical consideration of child welfare**, which is a guiding principle in family law. The empirical data indicates that respondents are particularly

concerned about the psychological and social impact of DNA testing on children. This introduces a moral dimension to the legal analysis, requiring courts to prioritize the best interests of the child over purely evidentiary considerations.

The framework also incorporates the concept of **misuse of legal processes**, particularly in the context of maintenance proceedings under the Code of Criminal Procedure, 1973. The study identifies that DNA testing may be used strategically to delay proceedings or evade financial obligations, thereby undermining the fairness of the legal process.

These elements are interconnected through a **balancing approach**, which serves as the central theoretical model of the study. The courts, acting as arbiters, are required to balance competing interests—scientific accuracy, legal presumptions, constitutional rights, and ethical considerations. The empirical findings support this model by indicating that stakeholders favour a regulated and cautious use of DNA testing rather than its mandatory application.

Thus, the conceptual framework of this research is structured around the idea that DNA testing in matrimonial disputes cannot be viewed in isolation as a scientific tool. Instead, it must be understood as part of a broader socio-legal system where law, ethics, and science intersect. The framework ultimately supports the need for a regulated approach that harmonizes scientific advancement with constitutional values and social justice.

HISTORICAL BACKGROUND AND RELEVANT LAWS

The legal framework governing DNA testing in matrimonial and maintenance disputes in India has evolved gradually, reflecting the intersection of traditional legal principles and modern scientific advancements. Historically, Indian law did not contemplate the use of scientific methods such as DNA testing for determining paternity. Instead, it relied on well-established legal presumptions designed to protect the institution of marriage and the legitimacy of children.

One of the earliest and most significant legal principles in this regard is embodied in Section 112 of the Indian Evidence Act, 1872, which creates a conclusive presumption of legitimacy for children born during the subsistence of a valid marriage. This provision was enacted in a social context where scientific methods for determining paternity were either unavailable or unreliable. The objective was to safeguard children from the stigma of illegitimacy and to ensure family stability by preventing frivolous challenges to paternity. The presumption could only be rebutted by proving non-access between the spouses, thereby setting a high threshold for disputing legitimacy.

With the advancement of medical science, particularly in the late twentieth century, courts

began to encounter cases where scientific evidence, such as blood group testing and later DNA profiling, was sought to determine biological relationships. Initially, the judiciary adopted a cautious approach, recognizing the potential social and ethical consequences of such testing. The landmark decision in *Goutam Kundu v. State of West Bengal* marked a turning point by laying down guidelines restricting the routine use of blood tests in paternity disputes. The Court emphasized that such tests should not be ordered casually and that the legitimacy of a child should not be put in question without strong justification.

As scientific techniques became more accurate, the judiciary gradually began to acknowledge the evidentiary value of DNA testing. This shift is evident in later decisions such as *Nandlal Wasudeo Badwaik v. Lata Nandlal Badwaik*, where the Supreme Court held that conclusive scientific evidence may prevail over legal presumptions in appropriate cases. This marked a significant departure from the earlier rigid approach and signaled a willingness to prioritize truth in certain circumstances.

At the same time, courts continued to emphasize the need for caution and balance. In *Banarsi Dass v. Teeku Dutta*⁵, the Supreme Court reiterated that the presumption of legitimacy cannot be lightly displaced and that DNA testing should not be used to unnecessarily stigmatize a child. This reflects the continued importance of social and ethical considerations in judicial decision-making.

The legal framework is further shaped by statutory provisions governing matrimonial and maintenance disputes. Proceedings under the Code of Criminal Procedure, 1973, particularly Section 125 relating to maintenance, often involve disputes over paternity, where DNA testing may be sought as evidence. Similarly, matrimonial disputes under personal laws, including the Hindu Marriage Act, 1955, may raise questions of legitimacy and infidelity, thereby bringing DNA testing into consideration.

In recent years, the constitutional dimension of DNA testing has gained prominence, particularly after the recognition of the right to privacy as a fundamental right in *Justice K.S. Puttaswamy v. Union of India*. DNA testing involves the extraction and analysis of genetic material, which constitutes sensitive personal information. As such, any attempt to compel an individual to undergo DNA testing must satisfy the constitutional requirements of legality, necessity, and proportionality. This development has added a new layer of complexity to the legal framework, requiring courts to balance scientific evidence with fundamental rights.

2- *Banarsi Dass v. Teeku Dutta* (2005) 4 SCC 449

Despite these developments, India still lacks a comprehensive statutory framework specifically

regulating DNA testing in civil disputes, particularly in the context of matrimonial and maintenance cases. The absence of clear legislative guidelines has resulted in a reliance on judicial discretion, leading to inconsistencies in the application of legal principles. While proposals for regulating DNA technology have been discussed, including draft legislation on DNA profiling, they primarily focus on criminal investigations and do not adequately address the unique challenges posed by family law disputes.

Thus, the historical evolution of laws relating to DNA testing in India reflects a gradual shift from rigid legal presumptions to a more flexible and balanced approach that accommodates scientific advancements. However, the continued absence of a dedicated legal framework highlights the need for comprehensive legislation that can effectively regulate the use of DNA testing while safeguarding the rights and interests of all parties involved.

DATA AND METHOD OF ANALYSIS

The present study is based on both **primary and secondary sources of data**, enabling a comprehensive examination of the legal and ethical issues associated with mandatory DNA testing in matrimonial and maintenance cases in India. The integration of empirical data with doctrinal analysis ensures a balanced understanding of both theoretical principles and practical realities.

The **primary data** for this research has been collected through a structured questionnaire administered to a sample of nineteen respondents. The respondents comprise advocates, legal professionals, and individuals possessing familiarity with matrimonial disputes and maintenance proceedings. The use of a questionnaire allowed for the systematic collection of opinions and perceptions regarding key issues such as the reliability of DNA testing, its ethical implications, its impact on child welfare, and the need for legal regulation. The sampling technique adopted for this study is **convenience sampling**, which, although limited in its generalizability, is appropriate for exploratory socio-legal research of this nature.

The **secondary data** has been gathered from a wide range of legal sources, including statutory provisions such as the Indian Evidence Act, 1872 and the Code of Criminal Procedure, 1973, as well as judicial pronouncements including *Goutam Kundu v.*

State of West Bengal and Nandlal Wasudeo Badwaik v. Lata Nandlal Badwaik. Academic literature, law commission reports, and scholarly articles have also been utilized to support the doctrinal analysis and to contextualize the empirical findings.

The method of analysis employed in this study is primarily **quantitative and interpretative in nature**. The responses collected through the questionnaire have been systematically

classified and analysed using the **percentage method**, which facilitates the identification of trends and patterns in the data. The results have been presented through tabular representations and graphical tools such as bar graphs and pie charts to enhance clarity and visual understanding. These graphical representations assist in highlighting key findings, such as the level of acceptance of DNA testing, concerns regarding its misuse, and the perceived need for legal regulation.

In addition to quantitative analysis, the study adopts a **qualitative interpretative approach** to examine the implications of the data in light of existing legal principles. The empirical findings are critically analysed in relation to statutory provisions, judicial precedents, and constitutional mandates. This combined approach allows the researcher to draw meaningful inferences and to evaluate whether the perceptions of respondents align with the prevailing legal framework. The method of analysis also involves a **comparative assessment**, wherein the empirical data is juxtaposed with judicial trends and doctrinal principles to identify areas of convergence and divergence. This enables a deeper understanding of how theoretical legal norms operate in practice and whether they adequately address the concerns of stakeholders.

However, the study acknowledges certain limitations in its methodology. The relatively small sample size and the use of non-probability sampling restrict the general applicability of the findings. Despite these limitations, the data provides valuable insights into the socio-legal dimensions of DNA testing and contributes to the broader discourse on the need for regulatory reforms.

Thus, the data and method of analysis adopted in this study ensure a systematic and comprehensive examination of the issue, combining empirical evidence with legal reasoning to arrive at well-founded conclusions.

EMPIRICAL ANALYSIS

Figure 1: Key Findings on DNA Testing Perception

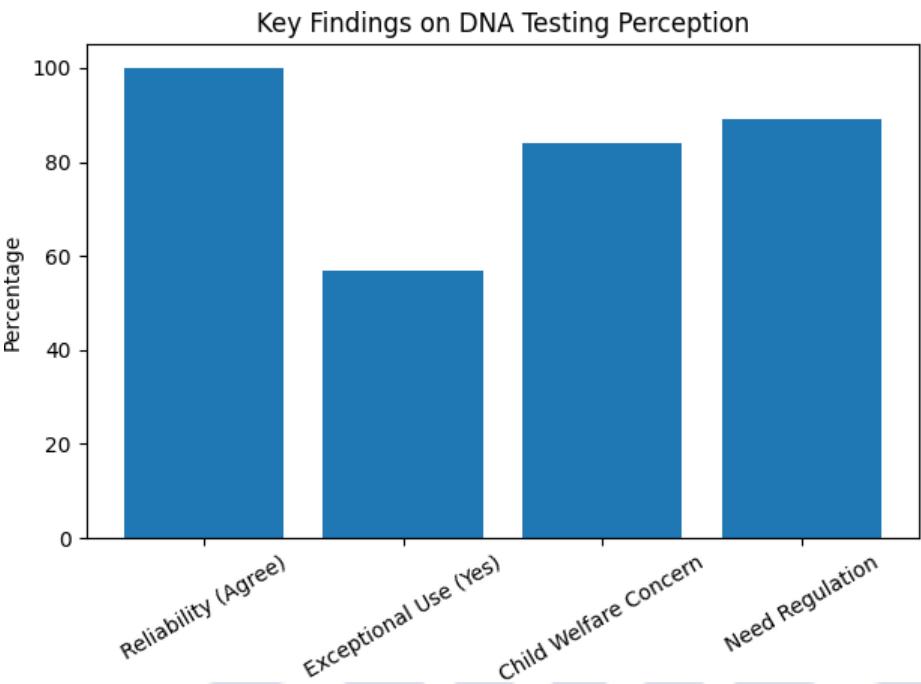
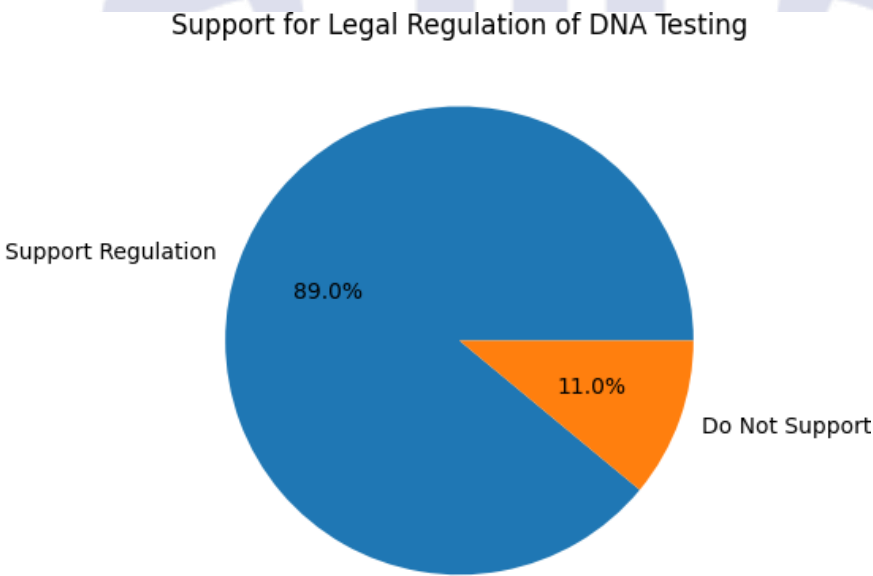


Figure 2: Support for Legal Regulation



The empirical data collected for the present study provides significant insight into the perceptions of stakeholders regarding the use of DNA testing in matrimonial and maintenance disputes. The analysis is based on responses obtained from nineteen participants, including advocates and legal professionals, whose opinions reflect both practical experience and socio-legal understanding of the issue.

The data reveals a unanimous consensus regarding the reliability of DNA testing as a scientific

tool. All respondents acknowledged that DNA testing is highly accurate and effective in determining biological parentage. This finding indicates that there is no substantial dispute regarding the scientific validity of DNA evidence. However, the acceptance of its reliability does not automatically translate into support for its compulsory use in legal proceedings.

A majority of respondents expressed the view that DNA testing should be employed only in exceptional circumstances rather than as a routine measure. This suggests a clear inclination towards a cautious and regulated approach. The respondents appear to recognize that matrimonial disputes involve sensitive personal and social dimensions, which cannot be resolved solely through scientific means. The data therefore reflects an understanding that the application of DNA testing must be guided by judicial discretion and not mechanical application.

The responses also highlight serious concerns regarding the welfare of the child. A significant proportion of participants indicated that DNA testing may have adverse psychological and social consequences for children, particularly in cases where it leads to the disclosure of illegitimacy. This finding reinforces the principle that the best interests of the child must remain paramount in family law disputes. It also demonstrates that respondents are aware of the long-term implications of such testing beyond the immediate legal outcome.

Another important aspect revealed by the data is the perceived impact of DNA testing on the dignity and reputation of women. A considerable number of respondents believe that compulsory DNA testing may subject women to humiliation, particularly in cases involving allegations of infidelity. This highlights the gendered dimension of the issue and underscores the need for sensitivity in judicial decision-making.

The data further indicates that DNA testing is sometimes perceived as being misused in matrimonial litigation. Respondents suggested that it may be employed as a strategic tool to delay proceedings or to avoid financial obligations, especially in maintenance cases. This finding supports the argument that the absence of clear legal guidelines creates opportunities for procedural abuse. It also emphasizes the need for safeguards to prevent misuse.

A particularly striking observation from the analysis is the overwhelming support for the introduction of a comprehensive legal framework regulating DNA testing. Most respondents expressed the view that the current reliance on judicial discretion is inadequate and that statutory guidelines are necessary to ensure consistency and fairness. This reflects a broader demand for legal certainty and protection of individual rights.

The graphical representation of the data further strengthens these conclusions. The bar graph demonstrates a high level of acceptance of DNA testing in terms of reliability, while

simultaneously indicating strong concern regarding its ethical implications.

Similarly, the pie chart reflects an overwhelming preference for legal regulation, highlighting the consensus among respondents on the need for reform.

Overall, the data analysis reveals a nuanced and balanced perspective among stakeholders. While there is clear recognition of the value of DNA testing as a scientific tool, there is equally strong awareness of its potential risks and ethical implications. The findings suggest that stakeholders favour a regulated and limited use of DNA testing rather than its mandatory application.

Thus, the empirical data supports the central argument of the study that mandatory DNA testing, if left unregulated, may lead to legal and ethical complications. It reinforces the need for a balanced approach that integrates scientific accuracy with legal principles, constitutional protections, and social considerations.

FINDINGS OF THE RESEARCH

The present study reveals a complex and nuanced understanding of the role of DNA testing in matrimonial and maintenance disputes in India. The findings, derived from both empirical data and doctrinal analysis, indicate that while DNA testing is widely recognized as a reliable scientific tool, its mandatory application raises significant legal and ethical concerns.

One of the most prominent findings of the study is the unanimous acceptance of DNA testing as an accurate method for determining biological parentage. This reflects a strong level of confidence in scientific evidence among stakeholders. However, the data clearly demonstrates that such acceptance does not extend to supporting its compulsory use. A majority of respondents favour a restricted approach, advocating that DNA testing should be employed only in exceptional circumstances. This aligns with the cautious judicial approach reflected in cases such as *Goutam Kundu v. State of West Bengal*, where the Supreme Court discouraged routine use of such tests.

Another significant finding relates to the welfare of the child. The empirical data indicates that a large proportion of respondents are concerned about the psychological and social impact of DNA testing on children. The possibility of exposing a child to stigma, identity conflicts, and emotional distress was widely acknowledged. This finding reinforces the principle that the best interests of the child must remain paramount and cannot be subordinated to the mere pursuit of scientific truth.

The study also reveals that mandatory DNA testing has implications for the dignity and privacy of individuals, particularly women. Respondents expressed concern that such testing may lead

to humiliation and reputational harm, especially in cases involving allegations of infidelity. This finding gains constitutional significance in light of the right to privacy recognized in Justice K.S. Puttaswamy v. Union of India, which includes protection of bodily autonomy and personal information.

A further important finding is the perceived misuse of DNA testing in matrimonial litigation. The data suggests that parties may seek DNA testing not solely for establishing truth, but also as a strategic tool to delay proceedings or evade maintenance obligations. This concern is particularly relevant in proceedings under the Code of Criminal Procedure, 1973, where disputes over paternity often arise. The absence of clear procedural safeguards appears to facilitate such misuse.

The study also highlights a significant gap in the existing legal framework. The overwhelming support among respondents for the introduction of statutory regulation indicates dissatisfaction with the current reliance on judicial discretion. The lack of uniform guidelines leads to inconsistency in judicial decisions and uncertainty in legal outcomes. This finding underscores the urgent need for comprehensive legislation governing DNA testing in family law disputes. Another important observation is the inherent conflict between scientific evidence and legal presumptions, particularly the presumption of legitimacy under the Indian Evidence Act, 1872. The study finds that stakeholders recognize the value of both principles and support a balanced approach rather than the absolute dominance of either. This reflects the evolving judicial trend of harmonizing scientific truth with social and legal considerations, as seen in decisions like *Nandlal Wasudeo Badwaik v. Lata Nandlal Badwaik*.

Overall, the findings of the research establish that DNA testing, while indispensable in certain cases, cannot be treated as a routine or mandatory procedure in matrimonial and maintenance disputes. The empirical evidence strongly supports the need for a regulated framework that ensures the use of DNA testing only when it is necessary, proportionate, and consistent with constitutional and ethical principles. Thus, the study concludes that a balanced and cautious approach is essential, one that integrates scientific advancements with legal safeguards and prioritizes the dignity, privacy, and welfare of individuals involved.

SUGGESTIONS

The findings of the present study highlight the urgent need for a structured and balanced legal approach to regulate DNA testing in matrimonial and maintenance disputes in India. In light of the legal, constitutional, and ethical concerns identified, the following recommendations are proposed.

A comprehensive statutory framework should be enacted to specifically regulate the use of DNA testing in civil disputes, particularly in family law matters. The existing reliance on judicial discretion has resulted in inconsistent application of principles, thereby creating uncertainty. A clear legislative framework would provide uniform guidelines regarding the circumstances under which DNA testing may be ordered, the procedure to be followed, and the safeguards to be ensured.

The use of DNA testing should be strictly limited to **exceptional cases**, where it is absolutely necessary for the adjudication of the dispute and where no alternative evidence is sufficient. Courts must adopt a **case-by-case approach**, ensuring that such testing is not ordered routinely or mechanically. This approach is consistent with the judicial principles laid down in *Goutam Kundu v. State of West Bengal*.

It is essential to incorporate **constitutional safeguards** to protect the right to privacy and dignity of individuals. Any order directing DNA testing must satisfy the test of legality, necessity, and proportionality as recognized in *Justice K.S. Puttaswamy v. Union of India*. Courts should ensure that consent is obtained wherever possible, and that individuals are not subjected to coercive testing without adequate justification.

Special emphasis must be placed on the **welfare of the child**, which should remain the paramount consideration in all cases involving paternity disputes. Courts should carefully evaluate the potential psychological and social impact of DNA testing on the child before ordering such tests. Measures should be adopted to protect the identity and dignity of the child, including maintaining confidentiality of results.

To prevent misuse, **strict procedural safeguards** should be introduced. Courts must scrutinize the intention behind requests for DNA testing and reject applications that appear to be motivated by delay tactics or attempts to evade legal obligations, particularly in maintenance proceedings under the Code of Criminal Procedure, 1973.

There is also a need to ensure **protection of genetic data** collected during DNA testing. Clear legal provisions should be introduced to regulate the storage, use, and sharing of such sensitive information, with penalties for unauthorized disclosure. This is crucial to prevent misuse and to uphold informational privacy.

Judicial officers should be provided with **specialized training and guidelines** to handle cases involving DNA testing. This would enable them to better understand the scientific, legal, and ethical dimensions of such evidence and to make informed decisions. Finally, awareness should be created among litigants and legal practitioners regarding the **limitations and consequences of DNA testing**. This would help in reducing unnecessary applications and promoting

responsible use of scientific evidence in family law disputes.

CONCLUSION

The present study has critically examined the legal and ethical dimensions of mandatory DNA testing in matrimonial and maintenance disputes in India, highlighting the complex interplay between scientific advancement, legal principles, and constitutional values. While DNA testing has undoubtedly revolutionized the process of determining biological parentage by providing near-conclusive scientific accuracy, its application in family law disputes cannot be viewed in isolation from its broader social and ethical implications.

The research establishes that although DNA testing is widely recognized as a reliable evidentiary tool, there is significant resistance to its mandatory use. The empirical findings demonstrate that stakeholders prefer a cautious and regulated approach, reflecting the understanding that matrimonial disputes involve deeply personal and sensitive issues that extend beyond the determination of biological truth.

A central concern identified in the study is the potential impact of DNA testing on the welfare of the child. The possibility of psychological harm, social stigma, and identity-related issues underscores the importance of prioritizing the best interests of the child. This concern aligns with the legal presumption of legitimacy under the Indian Evidence Act, 1872, which seeks to protect children from the adverse consequences of disputed parentage.

The study also highlights the constitutional implications of mandatory DNA testing, particularly in relation to the right to privacy and dignity recognized in *Justice K.S. Puttaswamy v. Union of India*. Compulsory extraction and analysis of genetic material involve a direct intrusion into bodily autonomy and informational privacy, thereby necessitating strict safeguards to prevent misuse.

Furthermore, the research identifies the growing concern regarding the misuse of DNA testing as a strategic tool in matrimonial litigation. In proceedings under the Code of Criminal Procedure, 1973, DNA testing may be employed to delay proceedings or evade maintenance obligations, thereby undermining the fairness and integrity of the legal process. The absence of a comprehensive statutory framework governing DNA testing in civil disputes has emerged as a significant gap in the legal system. While judicial pronouncements have attempted to strike a balance between competing interests, the reliance on case-by-case discretion has resulted in inconsistency and uncertainty. This underscores the urgent need for clear legislative guidelines that regulate the circumstances under which DNA testing may be ordered.

The study ultimately reveals that the issue is not one of choosing between scientific truth and

legal presumption, but of harmonizing both within a framework that respects constitutional values and ethical considerations. DNA testing, though a powerful instrument of truth, must not be allowed to override the fundamental principles of justice, dignity, and social welfare.

In conclusion, mandatory DNA testing cannot be justified as a general rule in matrimonial and maintenance cases. Its use must be carefully regulated and limited to exceptional circumstances where it is necessary for the administration of justice and proportionate to the rights involved. A balanced legal approach—one that integrates scientific advancements with safeguards for privacy, dignity, and child welfare—is essential for ensuring that the law remains both just and humane.

Thus, DNA testing should function as an aid to justice rather than a source of injustice, guided always by the overarching objective of protecting human dignity and ensuring equitable outcomes in family law disputes.

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- Aparna Ajinkya Firodia v. Ajinkya Arun Firodia, (2023) 6 SCC 519
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ANNEXURE -I

Legal and ethical issues of mandatory DNA testing in matrimonial and maintenance cases in India

legal and ethical issues of mandatory DNA testing in matrimonial and maintenance cases in India

This questionnaire is created as part of an LL.M, research study, titled " ***legal and ethical issues of mandatory DNA testing in matrimonial and maintenance cases in India*** " - the study on views among Advocates and Doctors. The purpose of this study is to critically examine the issues involved and opinions regarding mandatory DNA testing among Advocates and Doctors.

The data collected will be used for academic research and analysis. All responses will be confidential. Participation in this survey entirely voluntary, and respondents are requested to provide honest and unbiased response to facilitate meaningful findings.

1. What is your professional status ?
 - ☐ Advocate
 - ☐ Doctor
2. Do you think DNA testing help courts in determining the truth in paternity disputes?
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
3. Should courts order DNA testing only in exceptional circumstances ?
 - ☐ Yes
 - ☐ No
 - ☐ Maybe
4. Do you think mandatory DNA testing may harm the emotional well-being of the child?
 - ☐ Yes
 - ☐ No
 - ☐ Maybe
5. In your opinion, should the consent of the mother be necessary before conducting DNA test for the child?
 - ☐ Yes
 - ☐ No
 - ☐ Not Necessary
6. Do you believe DNA testing may affect the dignity and reputation of women in matrimonial disputes?
 - ☐ Yes
 - ☐ No
 - ☐ Not Sure
7. Should the legal presumption of legitimacy of a child be stronger than DNA evidence ?
 - ☐ Yes
 - ☐ No
 - ☐ Depends on the case
8. Do you think court should prioritize the best interest of the child over scientific proof in paternity dispute?
 - ☐ Yes

- ☐ No
 - ☐ Not Sure
9. Have you come across any case where DNA testing was requested in matrimonial or maintenance disputes ?
- ☐ Yes
 - ☐ No
 - ☐ Not Sure
10. Do you think DNA testing requests are sometimes used to delay matrimonial proceeding ?
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
11. Should there be strict judicial guidelines before ordering DNA testing ?
- ☐ Yes
 - ☐ No
 - ☐ Maybe
12. Do you think genetic information obtained through DNA testing should be legally protected from misuse ?
- ☐ Yes
 - ☐ No
13. Do you think compulsory DNA testing may discourage women from seeking maintenance ?
- ☐ Yes
 - ☐ No
 - ☐ Maybe
14. Should India enact a specific law regulating DNA testing in family dispute ?
- ☐ Yes
 - ☐ No
15. Do you think DNA testing improves fairness and justice in matrimonial litigation ?
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral

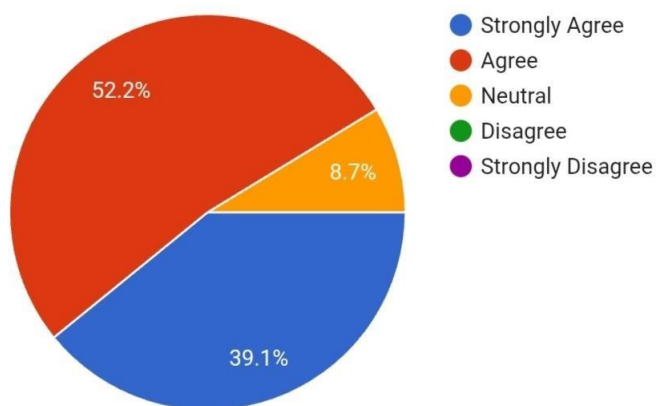
- Disagree
- Strongly Disagree

SUGGESSTIONS: -

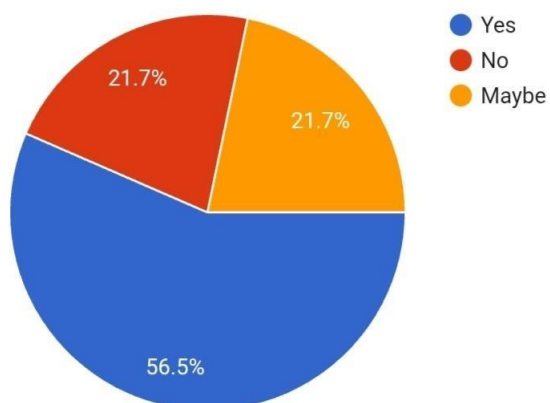
ANNEXURE -II

23 RESPONSES

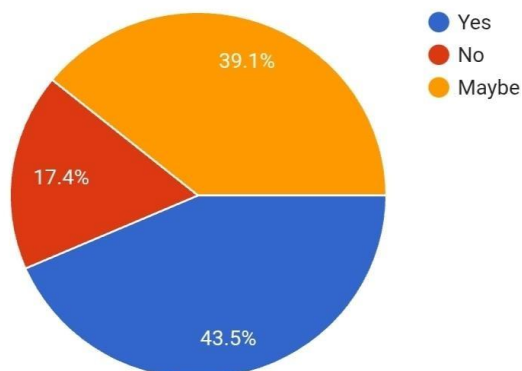
1. Do you think DNA testing help courts in determining the truth in paternity disputes?



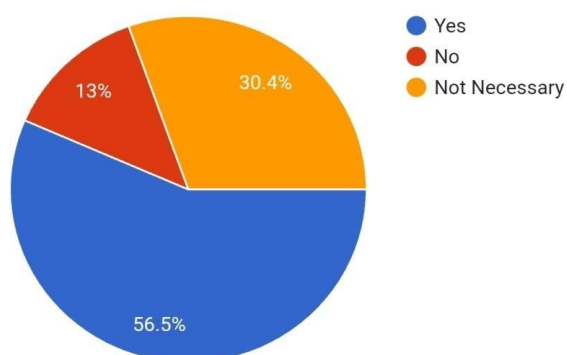
2. Should courts order DNA testing only in exceptional circumstances ?



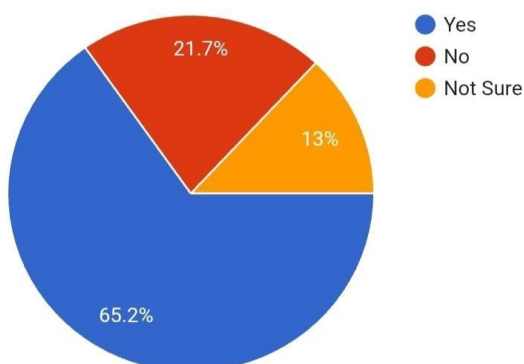
3. Do you think mandatory DNA testing may harm the emotional well-being of the child?



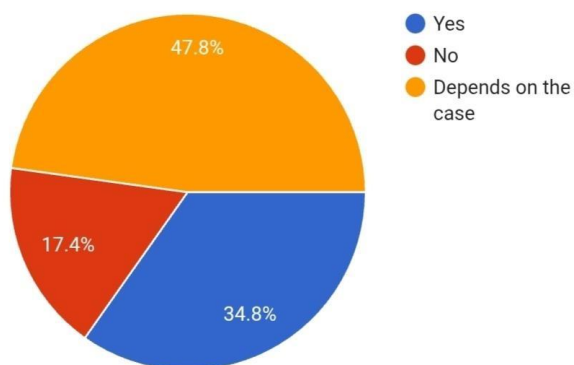
4. In your opinion, should the consent of the mother be necessary before conducting a DNA test for the child?



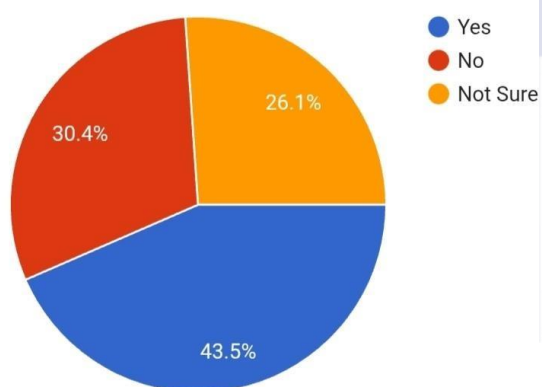
5. Do you believe DNA testing may affect the dignity and reputation of women in matrimonial disputes?



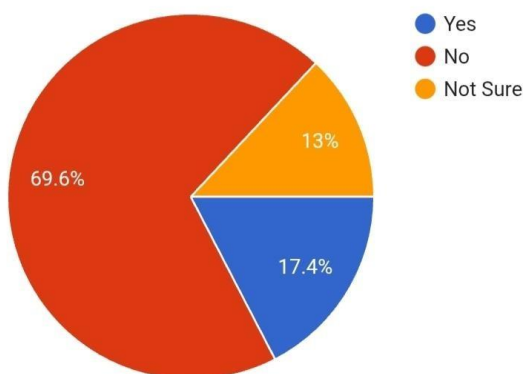
6. Should the legal presumption of legitimacy of a child be stronger than DNA evidence?



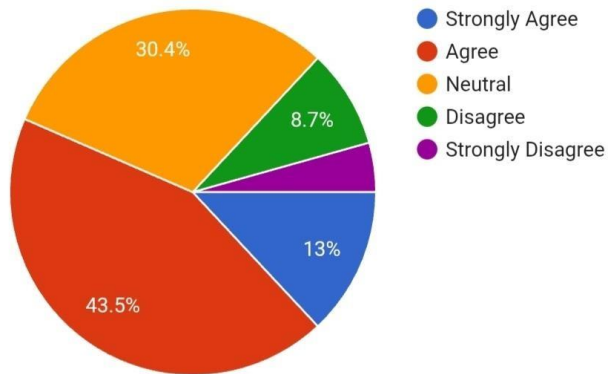
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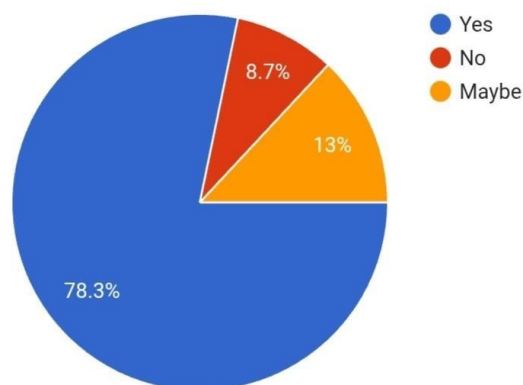
8. Have you come across any case where DNA testing was requested in matrimonial or maintenance disputes ?



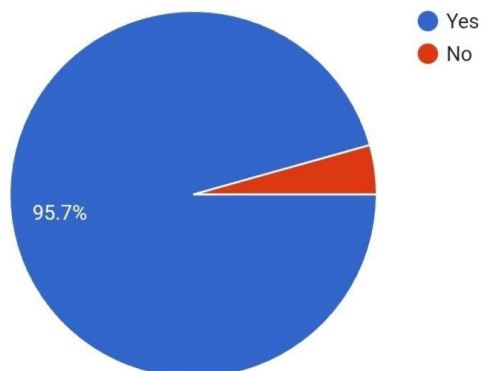
9. Do you think DNA testing requests are sometimes used to delay matrimonial proceeding ?



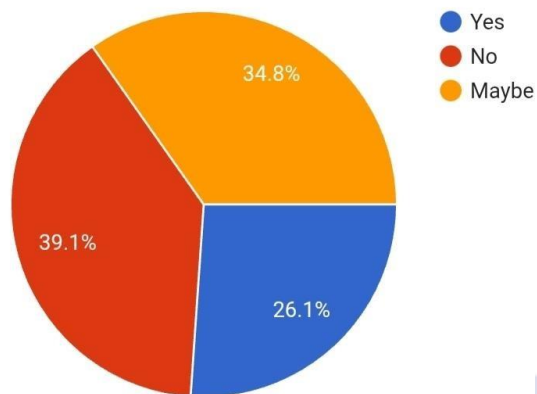
10. Should there be strict judicial guidelines before ordering DNA testing



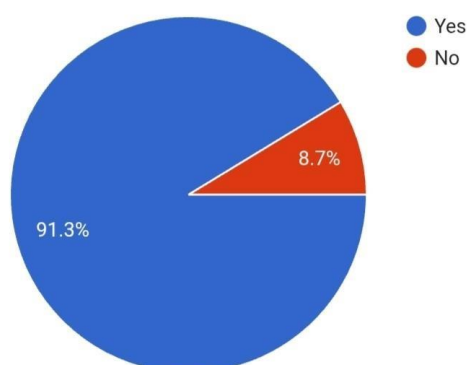
11. Do you think genetic information obtained through DNA testing should be legally protected from misuse ?



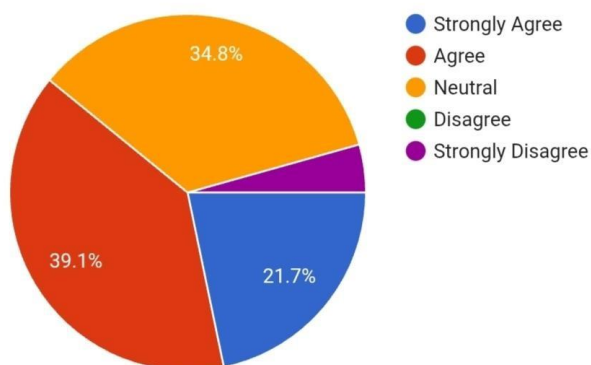
12. Do you think compulsory DNA testing may discourage women from seeking maintenance ?



13. Should India enact a specific law regulating DNA testing in family dispute ?



14. Do you think DNA testing improves fairness and justice in matrimonial litigation ?



7- SUGGESTION RESPONSES

1. DNA test shall be implemented in certain cases
2. DNA testing in family cases should be used carefully and only under proper legal supervision. It must be conducted strictly based on court orders to avoid misuse. Protecting the privacy and confidentiality of individuals involved is very important, as DNA results are highly sensitive. The welfare of the child should always be the top priority, especially in cases related to paternity disputes. Courts should ensure that such testing does not negatively affect the child's emotional and psychological well-being.
3. Marriage is build on the assumption that whatever the child that is born during marriage, it belongs to the husband, that's it. But it doesn't have any mechanism to ensure fidelity is maintained. And moreover Fidelity ensuring mechanisms like patrilocality, Patriarchy and restrictions of freedom of women are heavily criticised but no one have any solutions on how this fidelity contract would be maintained, the only solution available is DNA testing in such situations but it is heavily criticised for it's emotional baggage that it would have on woman and the child. Moreover it feels like the man is cornered due to all these emotional things but he got literally no say in whether the child is his, whether the fidelity is maintained or not. Then how can one ask him to provide for the family if he's not sure. Why the law felt one sided. Moreover the DNA tests should be mandatory post childbirth just like getting vaccines and should be normalised so the man doesn't feel only as a provider and a machine with no feelings. Because the current law treats only woman and kids have feelings and the man as only a provider or a machine. In short, normalise mandatory DNA testing. Why no question on emotional impact of man living with a doubt that whether the child belongs to him or not. Why the law dehumanised man
4. 🏠..Furthermore, 'well-being' is dependent on the age of the child; the impact on an infant is negligible.
5. Guidelines need to be implemented for DNA testing
6. DnA testing is not always needed
7. DNA test is not mandatory if both parties to the Matrimonial dispute accept the child's legitimacy, but in some execeptional situation if husband proves the child's illegitimacy by providing sufficient evidence, then the DNA test to be taken through court orders.
8. If either Petitioner or Respondent demands DNA Testing, it should be taken. Since Adultery has been legalised in India. It gives a clear cut idea for maintenance dispute.