Proof Necessary to Rebut the Presumption of Legitimacy of Child Under Section 112 of the Malaysian Evidence Act 1950

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ABSTRACT

Section 112 of the Malaysian Evidence Act 1950 establishes the conclusive presumption of legitimacy unless non-access is proven which presents certain complex legal issues. This article examines the adequacy of this provision in light of modern scientific developments and evolving judicial attitudes toward biological parentage. It employed doctrinal, library-based research methodology by analysing the aforementioned provision, case laws and comparative jurisprudence from the United Kingdom and other common law jurisdictions to rebut the presumption of legitimatcy. The article critically assesses medical evidence, gestational calculations, anthropological resemblance, contraceptive practices, blood grouping tests, and *deoxyribonucleic acid* (DNA) profiling, identifying their relative reliability and contemporary relevance. The findings highlighted significant gaps in the Malaysian legal framework, including the absence of statutory standards for DNA testing and the lack of judicial authority to compel scientific testing in civil paternity disputes. The article concludes by proposing a principled reform of section 112 that incorporates scientifically verifiable rebuttable elements, expands the gestational period to reflect current medical knowledge, and grants clear statutory powers to the courts to order DNA or blood testing. This article aims to align Malaysian law with scientific accuracy, promote consistency in judicial decision-making, and safeguard the best interests of the child.

Keywords: Presumption of Legitimacy, Paternity Dispute, DNA Evidence, Evidence Act 1950 (Malaysia)

INTRODUCTION

Questions surrounding the paternity of a child have caused individuals to seek judicial intervention, reflecting deep personal, social, and legal consequences attached to parental status (Milanich, 2019). In many instances, aggrieved parties turned to the courts to establish paternity to secure financial support, inheritance rights, guardianship, or citizenship for the child (Baker, 2004). Parents may initiate the court proceedings based on many reasons. For example, concerned mothers may initiate proceedings to ensure the child's welfare and access to maintenance, meanwhile the 'alleged' fathers may challenge paternity to avoid responsibilities that they believe are unjustly imposed upon them (Epstein, 2004). Additionally, adult children themselves increasingly seek legal recognition of biological lineage for purposes of identity, familial belonging, medical history, and emotional closure (Cacioppo, 2005). These motivations demonstrate that paternity is not merely a biological question but it is also a legal and social construct deeply intertwined with issues of responsibility, stability, and personal identity.

Apart from the interests of individuals, the state also has a vested concern in the accurate determination of paternity. Determining legal fatherhood status could discourage abandonment of children, preventing reckless reproductive behaviour and to ensure public resources will not be utilised to support undeserving children whose biological parents are actually could afford to do so. Disputes may also arise within the context of marital conflict were allegations of infidelity or non-access prompt contests over legitimacy. In some cases, extended

family members could bring such matters to court to resolve questions of inheritance or succession under civil or religious law. These various reasons for litigation illustrate that paternity disputes stemmed from a complex intersection of social expectations, economic obligations, and legal structures, thereby placing significant pressure on courts to reach just and accurate conclusions.

For decades, disputes over legitimacy or paternity have posed a challenging and burdensome responsibility for the courts to resolve. Absence of reliable testimonies which are not corroborated with independent relevant evidence poses difficulty on the trier of the facts to decide cases of paternity or legitimacy identification. As such, we can see that the the court's attitude sway more to maintaining and preserving the presumption of legitimacy or paternity rather than giving ways for the presumption to be overcome. In Malaysia for instance, the presumption of legitimacy is provided under section 112 of the Evidence Act 1950 which reads:

Birth During Marriage Conclusive Proof of Legitimacy

The fact that any person was born during the continuance of a valid marriage between his 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 son of that man, unless it can be shown that the parties to the marriage had no access to each other at any time when he could have been begotten.

From the above provision, it is clear that section 112 presumes the husband of the mother to be the father of the child. Consequently, questions of paternity cannot be separated or detached from questions of legitimacy. For this reason, the terms presumption of paternity and presumption of legitimacy are used interchangeably throughout this article. In essence, while paternity may stand as an independent concept, legitimacy cannot. Legitimacy must always be anchored to paternity, whether it refers to the legal father or the biological father of the child.

To propose a significant reform of section 112, this article undertakes a comprehensive examination of the types of evidence capable of rebutting the presumption of legitimacy or paternity in court proceeding. Firstly, it discusses various forms of medical evidence, including proof of sterility, impotency, gestational calculations, anthropological assessments, and the use of contraception (particularly by the man) to prevent pregnancy. Secondly, it examines blood test evidence, which is primarily relied upon to exclude paternity. The third part evaluates DNA evidence, its forensic value, and its application by Malaysian courts in both criminal and civil proceedings. Finally, this article presents the analysis and reflections on the evidentiary value and implications of each category of evidence.

METHODOLOGY

This article employed a doctrinal, library-based research methodology by focusing on the analysis of section 112 of the Evidence Act 1950, relevant decided Malaysian case laws, and authoritative literatures. The study further examines judicial decisions and scholarly writings from the United Kingdom to provide comparative perspectives. As section 112 originates from the common law, reported cases from other common law jurisdictions such as the United States are also analysed where appropriate, enabling a critical evaluation of how the presumption of legitimacy and its rebuttable elements have evolved across different legal systems. Through this doctrinal approach, the authors synthesises statutory interpretation, case analysis, and comparative insights to propose evidence-based reforms to section 112.

Medical Evidence

Medical evidence refers to the type of evidence which is based on knowledge in the medical field. In Malaysia, the medical evidence presented in the court must first be relevant to the fact in issue as stated under section 5 of the Evidence Act 1950 or any other relevant facts from section 6 to 55 of the same Act. There are of course various forms of medical evidence such as real or autoptic evidence, documentary evidence, experimental evidence as well as testimonies by experts. In this part, the author explores and assess various types of medical evidence that can be relied upon by the court in resolving issues of paternity identification.

Sterility and Impotency

Discussions of sterility and impotency in disputed paternity proceedings can be traced back to the period when common law first adopted the presumption of legitimacy, a concept rooted in the Greece-Roman and Middle Ages tradition (Helmholz, 1974). In earlier centuries, however, proving impotency or sterility posed significant challenges, as advanced medical knowledge and diagnostic tools were not yet available. Evidence of impotency was deeply personal in nature and could only be provided by the husband or wife, given the absence of medical examinations.

By the 13th century, midwives sometimes served as witnesses in court to testify on impotency. They would observe a couple in bed spanning over several nights before giving an opinion to the court regarding the husband's capability in having intercourse (Watson, 2011). In contrast, modern contemporary medical science has transformed the evidential landscape. Today, genuine cases of impotency or sterility can be established and verified by trained medical specialists, making the evidence far more reliable and objective than in earlier times.

Evidence of impotency must be distinguished from evidence of sterility, as the two conditions carry different medical and legal implications in paternity disputes. Impotency is medically referred to as erectile dysfunction denotes the inability to achieve or maintain an erection sufficient for sexual intercourse (Carson et al, 2008). To determine whether a man suffers from impotency, various diagnostic methods may be employed. For example, medical practitioners typically conduct a thorough physical examination of the penis and testicles to establish normal anatomical structure and nerve response (Ghanem, 2013). They also consider signs of hormonal imbalance, such as abnormal hair loss or enlarged breast tissue, and evaluate cardiovascular health through pulse and heartbeat assessments to determine whether blood flow is adequate (Miller, 2000). This physical evaluation is further complemented by examining medical and sexual history of the patient or subject, which helps identify underlying factors such as past surgeries, medications, lifestyle practices, occupational stressors, or reduced libido (Miller, 2000).

The doctors may order for blood or urine tests to screen for contributing conditions including diabetes, cardiovascular disease, kidney disorders, thyroid dysfunction, or hormonal irregularities, and may also conduct an ultrasound to assess penile blood circulation. In some cases, a nocturnal penile tumescence test is applied to monitor spontaneous erections during sleep, assisting in distinguishing physiological causes from psychological ones (Shoshany, 2017). If psychological factors such as depression, anxiety, or stress appear to be the root cause, the patient is typically referred for appropriate mental health treatment.

On the other hand, according to Rochon (1986), sterility refers to the inability to produce a live child. Male infertility is generally identified when a man exhibits low sperm production, impaired sperm function, or blockages that hinder the transport of sperm. In addition to these direct reproductive factors, infertility may also result from certain medical conditions, physical injuries, chronic health problems, genetic abnormalities, and lifestyle-related influences. Experts have always stressed that infertility also depends on the psychological relationship between a man and a woman.

There are however, situations where a man who suffer infertility issue is able to father a child with another woman. This happened in an old case of *Bury v Webber* (1598) 40 Eliz. 29. In this case, divorce was granted by the court on the ground of husband's sterility. However, when the husband remarried, he was able to father a child with his second wife. However, if the wife is pregnant when her husband is clearly infertile, the high probability suggested that the husband is not the father of the child.

Situation is different when a man is suffering from absolute sterility. This normally happened when he suffers from *azoospermia. Azoospermia* is always a good defence to a paternity claim. Absolute sterility is a medical term used when there are no sperm in the ejaculation process (Cocuzza et all, 2013). According to John Hopkins Institute of Medicine, around 10% of men in the world suffers infertility issues and out of the 10%, 1% of the men have *azoospermia*.

In the case of *Done & Egerton v Hinton & Starkey*, (1617) 1 Rol. Ab. 358, the husband was castrated before the wife was pregnant. The court declared that the castration was reliable evidence to rebut the presumption of legitimacy. However, care must be taken in a situation where a man has had a vasectomy. According to Rochon

(1986), vasectomy does not result in immediate sterilisation as sperm may live for more than a week in the muscular tube that travels into the pelvic cavity.

Caution must also be taken into consideration when accepting evidence of partial sterility as it is common for woman to get pregnant even though her husband suffers from low sperm count or low sperm motility. If accepted as evidence, this fact needs to be corroborated by blood or DNA test showing high improbability that the husband is not the father of the child. If impotency or sterility is pleaded by the husband or wife in order to rebut the presumption of legitimacy, the burden is on them to adduce medical evidence either in the form of expert testimony or medical reports. The expert testimony shall be relevant and admissible as evidence under section 45 of the Malaysian Evidence Act 1950. The expert may also support his testimony showing grounds of opinion from the lab test.

Calculation of Period of Gestation

The gestational period has long served as an important evidentiary tool in determining whether a child could biologically have been conceived during the period of a husband's access to his wife. By calculating the ordinary duration of human pregnancy (typically understood to fall between 280 to 300 days), courts may assess whether the timing of conception aligns with the husband's opportunity for intercourse. Courts historically relied heavily on gestational calculations where medical science was limited, treating an unusually short or unusually long pregnancy as persuasive evidence that the husband could not be the biological father. For example, in the case of *Preston-Jones v Preston Jones* (1619) 17 Jac 1, the House of Lords held that 270-280 days was the normal gestation period, however their Lordships took judicial notice that the normal period varies from one woman to another depending on their age and health issue. The Lordships further added that the longer the period deviates from the normal, the more easily the presumption could be rebutted.

Cases at common law in which gestation period was raised over 280 days have been discussed in *Alsop v Bowtrell* (1619) 17 Jac 1 (gestation period of 40 weeks 9 days); *Gardner Peerage Case* (1877) 2 AC 723 (gestation period of 311 days); *Bowden v Bowden* (1917) 62 Sol Jo 105 (gestation period of 307 days); *Gaskill v Gaskill* (1921) TLR 1 (gestation period of 331 days); *Wood v Wood* [1947] All ER 95 (gestation period of 346 days); *Hadlum v Hadlum* [1948] 2 All ER 412 (gestation period of 349 days).

In all these cases, the courts held that the child was legitimate because there was no evidence of adultery. These decisions demonstrate that the traditional 280-days gestational calculation was not applied rigidly, and that judicial attitudes tended to favour preserving legitimacy in order to protect the best interests of the child.

It should be noted, however, that these cases were decided at a time when the presumption of legitimacy could only be rebutted by evidence meeting the standard of beyond reasonable doubt. Following the introduction of section 26 of the Family Law Reform Act 1969, the presumption may now be rebutted on the civil standard of balance of probabilities. As a result, where the gestational period is exceptionally prolonged and medical evidence supports the improbability of paternity, courts today may be more willing to accept such evidence as sufficient to rebut the presumption of legitimacy.

Advancements in medical science have significantly improved the accuracy of determining gestational age. Ultrasound measurement of the embryo or foetus during the first trimester is now recognised as the most reliable method for establishing or confirming gestational age (Sherwood, 2000). Consequently, such evidence may enable a husband to challenge paternity even at an early stage of pregnancy, particularly where it can be shown that he had no sexual access to his wife during the probable period of conception. In such circumstances, a non-invasive prenatal DNA test may serve as powerful corroborative evidence, offering a highly reliable means of rebutting the presumption of legitimacy should any doubt or dispute arise.

Anthropological Test

In this section, the author examines the use of anthropological tests in disputed paternity proceedings. It involves observing or physically examining a child's inherited characteristics in order to assess genetic resemblance to the alleged parents (Hinsz, 1989). Physical traits such as eye colour, hair colour, and skin pigmentation are commonly recognised as genetically transmitted features (Richter, 2016).

In the United Kingdom, the Law Commission's Report on Blood Tests and Proof of Paternity (1968) acknowledged the potential relevance of such tests, citing that anthropological examination may provide significant evidence in paternity cases. The report explained that certain physical traits follow established genetic patterns, giving the example that the likelihood of two blue-eyed parents producing a brown-eyed child can be statistically assessed.

Despite recognising their theoretical value, the 1968 Law Commission did not recommend reliance on anthropological tests to rebut the presumption of legitimacy. Nonetheless, courts have historically considered evidence of physical or facial resemblance in cases such as *Bagot v Bagot* (1878) ILR Ir 1; *Burnaby v Baillie* (1889) 42 Ch D 282; *Slinsby v A-G* (1916) 33 TLR 120; and *C v C* [1972] 3 All ER 577. In these cases, courts consistently emphasised the need for caution, warning that resemblance-based evidence could be unreliable and should therefore be treated with great care when determining weight or probative value.

From an evidential standpoint, anthropological tests are inherently limited due to the subjective nature of physical comparison. There are several factors such as human facial features and general appearance are influenced by genetics, environmental, nutritional, and developmental factors, making resemblance an unreliable indicator of biological parentage (Yu, 2019). Modern geneticists also caution that many visible traits such as facial shape or pigmentation are polygenic, meaning that they are controlled by multiple genes, which reduces the accuracy of predicting paternity from appearance alone (Richmond, 2018). As a result, courts have become increasingly reluctant to place substantial reliance on such evidence, especially where more objective and scientifically robust methods are more preferred.

In practice, the probative value of anthropological evidence in rebutting paternity or legitimacy is overshadowed by technological advances in biological testing. With the availability of blood grouping, HLA typing and DNA profiling, courts now prefer methods that offer quantifiable levels of accuracy rather than subjective visual assessments. While anthropological observations may still be referenced in cases lacking scientific evidence, they are rarely conclusive and must be corroborated by stronger forms of proof. Therefore, although anthropological tests played a historical role in family law, their modern relevance is largely residual, serving only as supplementary evidence in exceptional circumstances.

Contraception

In this part, the author examines the application of contraceptive evidence in cases where a husband seeks to disprove paternity. For the purposes of this discussion, contraceptive evidence refers to proof that the husband employed contraceptive methods during intercourse with the intention of preventing pregnancy. The most common male contraceptive methods include the use of condoms, vasectomy, and *coitus interruptus* (withdrawal). English case law contains several examples where the courts have addressed the relevance of contraception in relation to the presumption of legitimacy.

In *Baxter v Baxter* [1947] 2 All ER 886, the House of Lords held that a marriage was deemed consummated despite the husband's use of condoms, and therefore the husband was considered to have had sexual access; consequently, he could not rebut the presumption of legitimacy. Similarly, in *White v White* [1948] 2 All ER 157, the court ruled that evidence of contraceptive use specifically, coitus interruptus, was insufficient to rebut the presumption, as pregnancy may still occur despite the method being used correctly. In *Gordon v Gordon* (1903) P 141, the court further affirmed that even where a wife may have engaged in extra-marital relations, evidence of contraceptive practices by the husband did not displace the presumption if intercourse between the spouses occurred during the relevant conception period. The court emphasised that what must be proven is the complete absence of intercourse that could have resulted in conception. This position was later reaffirmed in the case of *Watson v Watson* (1954) P 49, where the court held that the husband's use of contraceptives did not alter the legal principle that sexual access, rather than contraceptive intention, was the determining factor.

From an evidential perspective, contraceptive use (except for vasectomy) provides only weak support for rebutting the presumption of paternity. This is because most contraceptive methods do not eliminate the possibility of pregnancy, but merely reduce its likelihood. Condoms may fail, withdrawal is inherently unreliable, and even modern forms of contraception carry measurable failure rates. Courts have therefore been cautious in attributing substantial probative value to such evidence, recognising that biological conception can still occur

despite the use of contraceptives. For this reason, evidence of contraceptive use is generally treated as supplementary rather than determinative, and it seldom satisfies the legal threshold required to rebut paternity on its own.

In practice, the evidential weight of contraceptive use has diminished even further due to the availability of scientifically robust methods of paternity determination, such as blood grouping and DNA profiling. DNA testing, in particular, offers higher accuracy levels than speculative nature of claims based on contraceptive failure or success. Consequently, while evidence of vasectomy may be considered highly relevant, other forms of contraceptive evidence, such as condom use or withdrawal, are often regarded as redundant unless supported by more reliable biological evidence. Ultimately, the modern judiciary places far greater emphasis on objective scientific testing, causing contraceptive evidence a peripheral and generally weak form of proof in paternity and legitimacy disputes.

Blood Test Evidence

As stated earlier, disputed paternity proceedings have historically presented significant challenges, particularly in situations where reliable evidence of a biological father–child relationship was unavailable. With the advancement of modern science and technology, parties are now able to present to the courts more accurate and objective forms of evidence pertaining to personal identity.

One such scientific tool is the blood grouping test, which can conclusively exclude paternity attributed to a particular man. This method is based on the principle that certain identifiable properties of blood are inherited from both biological parents. The ABO blood group system was first discovered by Karl Landsteiner in 1901 (Schneider, 2024) who identified three blood groups: A, B, and O (Schneider, 2024). A fourth group, AB, was later discovered by another research team, completing the classification widely employed today (Schneider, 2024).

In relation to the presumption of legitimacy, the presence or absence of specific blood-group characteristics may exclude the husband as the biological father of a child. For example, if both husband and wife have blood group B, their child must also possess group B blood. If the child has group A blood, this anomaly conclusively excludes the husband as the father, since neither parent carries the A antigen necessary to transmit this trait. However, blood grouping evidence becomes less probative when the husband and the alleged biological father share the same blood group. Despite this limitation, blood grouping tests have gained broad acceptance among scientists and medical practitioners (Ratimorszky, 1970), as blood type is unaffected by disease, medication, age, or physical development and remains constant from birth throughout a person's life.

In the United Kingdom, blood test evidence in paternity disputes first gained statutory recognition under the Family Law Reform Act 1969. Nonetheless, courts had already accepted such evidence in earlier decisions. In *Hing v Hing & Clift* (1962) JPLGR 347, a husband successfully relied on blood test results to prove that the child of the marriage was not biologically his. Similarly, in *A v A (otherwise L)* (1962) JPLGR 347, the husband petitioned for nullity on the ground that his wife had conceived by another man, and blood test evidence conclusively excluded him as the father. Concerns regarding consent for blood testing, particularly in relation to children, arose in cases such as *W v W* (1964) P 67, *Holmes v Holmes* [1966] 1 All ER 356, *H v H* [1966] 3 All ER 560, and *L v L* (1968) P 119. These concerns were later addressed by section 20 of the 1969 Act, which empowers courts to direct blood testing where paternity is in dispute. The Blood Test (Evidence of Paternity) Regulations 1971 further provides for procedures governing the taking of samples and testing.

From an evidentiary point of view, blood grouping tests are most valuable as a tool of exclusion rather than confirmation (Unger, 1953). While they cannot positively identify a particular man as the biological father, they can definitively prove that a man cannot be the father where the child carries a blood group incompatible with that of the husband (Jills, 2008). Their reliability lies in the scientific stability of blood group inheritance patterns, which courts have consistently acknowledged. However, the probative value of blood test diminishes significantly when the relevant parties share common blood groups, or where a wide range of potential fathers possess the same blood type. As such, blood grouping tests are best considered a preliminary screening method rather than a conclusive determinant of paternity.

In contemporary legal practice, the role of blood grouping tests has been largely overtaken by more advanced and accurate scientific methods, particularly DNA profiling. DNA testing provides a far higher degree of certainty, with accuracy rates nearing 99.99% when excluding or confirming paternity. Consequently, while blood grouping tests continue to hold historical and contextual importance, they are rarely relied upon as primary evidence in modern paternity disputes. This trend is evident in Malaysia, where case analysis shows that courts prefer DNA evidence over blood-group testing when determining or rebutting paternity. Blood grouping may still serve as useful corroborative evidence, but its function today is largely supplementary in light of the superior precision offered by DNA technology.

DNA Evidence

In this part, the author discusses the use of DNA evidence as conclusive evidence to rebut the presumption of paternity or legitimacy. To better understand the use of DNA evidence in the Malaysian legal system, a basic understanding on the type of evidence is thus essential.

DNA stands for '*deoxyribonucleic acid*.' In Malaysia, the abbreviation DNA has been explained in Deoxyribonucleic Acid (DNA) Identification Act 2009. Reference to the word DNA specifically could not be found in the Malaysian Evidence Act 1950.

DNA is the chemical that can be found in cell in the human's body and it carries unique genetic information (Butler, 2011). On all human, half of the DNA is inherited from the mother and the other half from the father. As DNA profile of each individual is almost unique, the chance of two people having identical profile is less than one in a billion (Bukyya, 2021). However, this is not the case for identical twins (Bukyya, 2021).

In Malaysia, the use of DNA evidence is overwhelming, especially in the criminal justice system. DNA evidence is often given by an expert and the relevancy and admissibility of expert testimonies are governed by section 45 of the Malaysian Evidence Act 1950. In relation to paternity test, the use of DNA evidence is to determine or to exclude whether an individual is the biological father of a child.

DNA test is currently the most advanced and accurate technology where the probability of matching is 0% when the alleged father is not biologically related to the child, and is typically 99.99% when the alleged father is biologically related to the said child (Jills, 2008). Genetic tests are performed on sample or samples gathered from a person. These samples are biologically connected to a person such as blood, hair, skin, semen, amniotic fluid or other tissue. In relation to paternity testing, two samples must be taken from two individuals, namely the alleged biological father as well as the concerned child.

DNA tests to prove or disprove paternity had been adduced in several cases in Malaysia. Although the use of DNA test in this area is scarce, predominantly on the ground that it is a sensitive issue, the admissibility of it has been discussed by few court decisions. These decisions involve paternity of legitimate as well as illegitimate child. From the decisions of *Peter James Binstead v Jucenvia Autor Partosa* [2000] 2 MLJ 569, *Lee Lai Cheng (suing as the next friend of Lim Chee Zheng and herself) v Lim Hooi Tek* [2017] 10 MLJ 331 and *Heng Choon Lee & Anor v Wong Choon Ho* [2020] 7 MLJ 387; unmarried woman, who gives birth to illegitimate child, is allowed to bring an action against the biological father for an order of maintenance. However, DNA paternity test may be given as proof of paternity if the alleged biological father give consent to undergo such procedure. The same treatment is also available to the biological father who wishes to prove paternity of his alleged child i.e both of the parties must consent to such procedure.

In relation to admissibility of DNA evidence to rebut paternity or legitimacy of legitimate child, few decisions will be discussed as follows. The first case that the author wishes to point out is the case of *Ng Chian Perng v Ng Ho Peng* [1998] 2 CLJ Supp 227. In this case, on the claim under the Married Woman and Children (Maintenance) Act 1950 where a married woman claimed maintenance of her child from a man (the defendant), the court held that DNA evidence (although not given in this case) cannot be accepted. The court's decision is based on the ground that the child was born during the marriage of the plaintiff to her husband and section 112 of the Malaysian Evidence Act 1950 only allows evidence of non-access to be tendered. The provision bar DNA evidence to be tendered as basis of proving or rebutting legitimacy.

However, in another case of *Alesiah Jumil & Chua Kin Han v Julas Joenol* [2013] 1 LNS 1213, on the claim under the Legitimacy Act 1961, the court held that a married woman who had been divorced by her previous husband, may adduced DNA evidence to rebut legitimacy under section 112. In this case, both the children of the plaintiff were born during valid marriage between the plaintiff and the defendant. They were later divorced and the plaintiff petitioned to the court under the Legitimacy Act 1961 to declare that both her children are legitimate children of her and the second plaintiff, instead of the defendant. In this case, the plaintiff adduced DNA report which stated that both the children were the biological children of the second plaintiff, although they were born during the valid marriage of the plaintiff and the defendant. The plaintiff also claimed that the defendant was impotent, which was not rebutted. The court allowed the plaintiff's claim.

In a more recent decision of *CAS v MPPL & Anor* [2019] 2 CLJ 454, the Court of Appeal ordered the High Court to decide on paternity test to be conducted when a plaintiff claimed that a child born to a married woman was his biological issue. In this case, the defendants were married and during their marriage, the first defendant gave birth to a daughter. However, according to the plaintiff, he had an affair with the first defendant. The affair started even before the first defendant was married to the second defendant and continued even after the defendants' marriage. It was also the plaintiff's contention that when the second plaintiff was not in the country, the plaintiff and the second defendant had lived as a family, together with the child. The first defendant then refused giving the plaintiff access to the daughter and ended their relationship.

The plaintiff then commenced an action at the High Court, seeking reliefs that a DNA test be carried out in order to determine whether the plaintiff was the biological father of the child. The plaintiff also claimed that if the test shows that the plaintiff was the father of the child, the plaintiff sought to be declared as the biological father in the birth certificate of the child; to be given joint guardianship; to be given reasonable access rights according to his work schedule; and for the defendants, or their representatives, to be prevented from bringing the child out of the country without the plaintiff's written permission.

According to the plaintiff, it was necessary for the child to know who her biological father was in case of any future medical emergencies. The defendants on the other hand, submitted that section 112 of the Evidence Act 1950 is in operation and that the child, who was born to the defendants during the subsistence of a legal marriage, was the legal child of the defendants. The High Court found that the plaintiff's action was caught by section 112 of the Evidence Act 1950. The DNA test sought by the plaintiff concerned both the paternity and legitimacy of the child. Section 112 presumes the fact of marriage as conclusive proof of legitimacy and can only be rebutted on the grounds of non-access between the parties to the marriage.

The law does not authorise the use of DNA tests to challenge paternity and to rebut the presumption using other evidence. The High Court further added that allowing the DNA test would have adverse effects on the welfare of the on the ground that the order would make the child illegitimate and this would have negative consequences for the child. The plaintiff appealed and submitted that his issue had nothing to with the legitimacy of child as it only concerned with the determination of paternity and it was in the best interest of the child to know who her biological parents were.

The Court of Appeal allowed plaintiff's action and Nallini Pathmanathan JCA who delivered the judgement of the court differentiate the concepts of 'paternity' and 'legitimacy.' In the Court of Appeal judgement, the court held that 'paternity' concerns a question of fact while 'legitimacy' is a question of law. Section 112 of the Evidence Act 1950 does not bar enquiries into paternity. Inquiry into paternity does not illegitimise a child. The emphasis on the fear of illegitimising a child was not the determining factor when deciding to order a DNA test to determine the paternity. Instead, the best interest of the child to know his/her biological parents is the larger concern. The Court of Appeal also added that the 'supposed' policy behind section 112 of the Evidence Act 1950 in not wanting to illegitimise children ought no longer to be the sole judicial philosophy in light of modern-day global advancements in science and international human rights law.

The above three cases related to the use of DNA evidence to rebut paternity or legitimacy of child born during marriage. If we analysed the court's decisions, we can see that DNA evidence may be used to rebut paternity or legitimacy of a child born during marriage depending on circumstances. In *Ng Chian Perng*, the action was taken by the mother who were still married to his husband and evidence of 'non-access' was not given at all. Her claim

that her child was not the biological child of her husband was not entertained by the court. In *Alesiah Jumil*, the court allowed DNA evidence to be admitted because the mother of the children had subsequently married the biological father. In that case, the mother had also pointed to the court that her previous husband was impotent. In *CAS v MPPL & Anor*, the Court of Appeal ordered the High Court to consider DNA test to be carried based on the notion that inquiry into paternity does not illegitimise a child and it is for the best interest of the child to know his/her origin. This uncertainty surrounding the admissibility of DNA evidence in paternity or legitimacy cases weakens the predictability of the law, permitting courts to fill legislative gaps with discretionary reasoning and thereby promoting the rise of judge-made jurisprudence.

The author wishes to emphasise that there is currently no single piece of legislation in Malaysia that provides clear statutory guidance on the standards governing the conduct of DNA testing for civil proceedings, including disputed paternity cases. Most DNA evidence tendered in such proceedings is derived from tests conducted by private clinics, raising legitimate concerns regarding the reliability and admissibility of the results, particularly where accepted scientific standards and procedures may not have been followed. By contrast, in the United Kingdom, courts may refer to instruments such as the Blood Test (Evidence of Paternity) Regulations 1971, the British Nationality (Proof of Paternity) Regulations 2006, and the DNA Policy Guidelines to assess whether a DNA test has been conducted in accordance with recognised scientific norms. Once compliance with such standards is established, the courts are then empowered to assign appropriate evidential weight to the test results.

Malaysian law is similarly silent on the requirement of consent for DNA testing in civil paternity disputes and on whether courts possess the authority to compel an individual to undergo such testing. This issue was addressed in *Lee Lai Cheng (suing as next friend of Lim Chee Zheng and herself) v Lim Hooi Teik* [2017] 10 MLJ 331, where the Court held that Malaysian law does not grant courts the power to order DNA testing in civil matters. The Court further clarified that there is no statutory provision or common law principle authorising compulsory DNA testing in civil proceedings, nor may a litigant rely on the court's inherent jurisdiction under the Rules of Court 2012 to assert such a substantive right. The only legislation empowering compulsory DNA sampling is the Deoxyribonucleic Acid (DNA) Identification Act 2009, which applies exclusively to criminal proceedings and, even then, requires the consent of the individual before samples may be taken.

In 2019, the Ministry of Health issued the Guidelines on Ethical Issues in the Provision of Medical Genetic Services in Malaysia, aimed primarily at reducing the prevalence of genetic disorders. Article 7 of these Guidelines states that genetic testing in clinical settings must be voluntary and conducted only with the informed consent of the individual concerned. For minors under the age of 18, consent must be obtained from a person with parental responsibility. These Guidelines, however, pertain specifically to genetic disorders and do not address the legal framework governing paternity testing. Consequently, the position articulated in *Lee Lai Cheng* continues to represent the prevailing legal approach in Malaysia.

In light of the foregoing, it may be summarised that although DNA evidence is increasingly utilised within the Malaysian legal system (particularly in criminal proceedings), there remains no single legislative instrument that delineates the court's power to order paternity testing or prescribes the standards for determining whether such tests have been conducted properly. Nonetheless, DNA evidence has been accepted as proof of paternity in cases such as *Alesiah Jumil* and *CAS v MPPL*, where the consent of the relevant parties was obtained and the courts admitted the evidence in the best interests of the child. Conversely, the courts' ability to rely on DNA evidence is significantly constrained where such consent (particularly from adults) is withheld.

ANALYSIS OF PROOF NECESSARY TO REBUT PRESUMPTION OF LEGITIMACY IN MALAYSIA

In this section, the author evaluates various types of evidence that have been mentioned above and analyses their relevance, reliability, and suitability for inclusion as rebuttable elements in a proposed reform of section 112 of the Evidence Act 1950. A careful examination of these evidentiary categories is essential, as the credibility and weight attributed to each type of proof will determine the effectiveness, fairness, and modernity of any reform to the presumption of legitimacy in Malaysia.

The first category concerns medical evidence, specifically impotency and sterility. Such evidence was recognised by the common law as proof of non-access, forming a legitimate basis to rebut the presumption of legitimacy. The inherent reliability of medical findings particularly in cases of absolute sterility, such as *azoospermia*, strongly supports their express inclusion as rebuttable elements under a reformed section 112. Codifying these elements would provide clarity to courts and litigants, reduce reliance on judicial discretion, and ensure that biological impossibility is appropriately recognised within Malaysian legal doctrine.

Secondly, evidence relating to the gestational period warrants reconsideration. The current statutory reference to a 280-days period in section 112 is rooted in historical assumptions and does not reflect contemporary medical knowledge. Obstetric science recognises that normal gestation may extend up to 300 days, and modern ultrasound technology allows for highly accurate estimation of conception dates. Reform should therefore expand the statutory gestational window to 300 days and expressly allow medical evidence, including ultrasound findings and DNA or blood group analysis, to corroborate calculations of conception. This would protect genuine cases from wrongful exclusion while ensuring fairness in disputed paternity proceedings.

Thirdly, the author has considered the use of anthropological tests and evidence of contraceptive practices, both of which suffer from significant weaknesses. Anthropological resemblance is inherently subjective and susceptible to error, while contraceptive methods (other than vasectomy) have measurable failure rates. Although English courts apply the civil standard of proof in legitimacy cases, the Malaysian legal system must remain cautious about admitting evidence that may jeopardise the stability of the family unit or undermine the best interests of the child. For these reasons, such evidence should not be listed as primary rebuttable elements under section 112; at most, they may serve as supplementary or corroborative proof.

Finally, the article addressed blood grouping tests and DNA profiling, both of which offer substantially stronger evidential value. Blood tests are capable of conclusively excluding paternity, while DNA analysis provides near-perfect accuracy in confirming or disproving biological relationships. These scientific tools should form the core of a modernised section 112. However, for such reform to operate effectively, Malaysian courts must be expressly empowered to order blood or DNA testing, particularly where the child is a minor. The experience of jurisdictions such as the United Kingdom and the United States demonstrates that statutory authority is essential to allow courts to compel scientifically reliable testing while safeguarding consent and due process.

At present, as established in *Lee Lai Cheng*, Malaysian courts lack inherent jurisdiction to order DNA or blood tests in civil matters because the Rules of Court 2012 govern procedural rather than substantive rights. Reform of section 112 must therefore be accompanied by amendments to substantive family law statutes, such as in the Law Reform (Marriage and Divorce) Act 1976 or a dedicated Paternity Testing Act. This is to provide clear statutory authority for court-ordered testing. This would eliminate ambiguity, reduce inconsistent judicial approaches, and ensure that scientific evidence is utilised responsibly and consistently in the determination of paternity and legitimacy.

Thus, it is the authors recommendation that reform of section 112 should incorporate a principled framework that:

(i) expressly identifies reliable rebuttable elements such as medical evidence, and DNA or blood test results;
(ii) expands the current statutory gestational period from 280 days to 300 days to reflect contemporary medical knowledge and protect genuine cases; and
(iii) empowers the courts with clear statutory authority to order scientific testing where necessary.

Such reforms would align Malaysian law with contemporary scientific advancements, promote legal certainty, and uphold both the integrity of the family unit and the best interests of the child.

CONCLUSION

In light of the discussion throughout this article, it is clear that the presumption of legitimacy under section 112, though historically significant and rooted in the need to protect family stability, no longer adequately reflects the realities of modern science and contemporary societal expectations. Advances in medical and forensic

technologies (particularly in the areas of gestational dating, blood grouping, and DNA profiling), provide reliable, objective, and accurate tools for determining biological paternity.

The current legal framework, however, does not provide clear statutory guidance on the admissibility, standards, or procedural requirements governing the use of such evidence. This gap has resulted in inconsistent judicial approaches, uncertainty in civil proceedings, and a lack of clarity regarding the court's power to compel scientific testing. A reformed section 112 must therefore expressly recognise scientifically verified rebuttable elements, clarify evidentiary standards, and grant courts the substantive authority needed to ensure just and accurate outcomes.

It is also submitted that reform of section 112 is not merely a technical exercise but a necessary step toward harmonising Malaysian legal doctrine with established scientific principles, comparative jurisprudence, and the need to safeguard the best interests of the child. By codifying reliable scientific evidence, expanding the period of gestation, and empowering courts to order DNA or blood testing within a clear legislative framework, the law would better balance the competing interests of marital stability, parental responsibility, and biological truth. Such reform would strengthen public confidence in the legal system, promote fairness in the resolution of paternity or legitimacy disputes, and ensure that the presumption of legitimacy continues to serve its intended purpose in an era where scientific verification is readily available and widely accepted.

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