

DETERMINATION OF AGE: A MEDICO-LEGAL CONUNDRUM

Abstract

Age assessment is an integral part of justice delivery both in civil and criminal matters since various rights and liabilities are conditioned upon age. Law recognises chronological age which primarily depends on birth records. In India, the birth records are either missing or poorly maintained and legal requirement to prove veracity of entries made in birth records are also rigorous. However, forensic experts determine biological age based on ageing, which may not necessarily be identical with chronological age. Procedures for forensic age estimation have inherent limitations and suffer from lack of precision, consistency and reliability. Consequently, the courts face huge challenge in dealing with matters related to age of the party to *lis* particularly in case of adolescent and elderly. Legislative intent of various special legislations such as the POCSO Act and the JJ Act may not be fulfilled in letter and spirit due to difficulties in age assessment, which needs attention.

I Introduction

ESTIMATION OF age is an essential but complex procedure used for various purposes in administration of justice in determination of culpability and socio-legal categorization and human identification.¹ Determination of age with greater precision is essential for ascertaining criminal liability, especially for invoking provisions of the POCSO Act, 2012² and the Juvenile Justice Act, 2015,³ where age is a crucial factor. Besides, age of consent, a significant legal doctrine which illuminates the relationship between law, morality and liberty,⁴ necessitates establishing the age of a victim below certain years for charging an accused for statutory rape.⁵ In the global legal right discourse, age connotes chronological age, but cognitive capacity and mental age also

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- 1 Andreas Schmecling and Sue Black, "An Introduction to the History of Age Estimation in the Living in Sue Black" in Anil Aggrawal and Jason Payne-James (eds.) *Age Estimation in the Living: The Practitioners Guide* 1-18 (Wiley-Blackwell: Oxford, 2010).
 - 2 The Protection of Children from the Sexual Offences Act, 2012 came into effect from Nov. 14, 2012.
 - 3 The Juvenile Justice (Care and Protection of Children) Act, 2015 came into force on Jan. 15, 2016. The new legislation has repealed the earlier JJ Act, 2000.
 - 4 Hoko Horii, "Adolescents' 'consent' to sex: Law and morality in the age of consent laws" *leidenlawblog*, *Universiteit Leiden* May 20, 2020, available at: <https://leidenlawblog.nl/articles/adolescents-consent-to-sex-law-and-morality-in-the-age-of-consent-laws>(last visited on Feb. 20, 2021).
 - 5 GK Goswami, "Role of Forensics in Strengthening Child Rights under the POCSO Act, 2012", DSc Dissertation submitted in National Forensic Sciences University, Gandhinagar 72 (2020), available at: <http://shodhganga.inflibnet.ac.in:8080/jspui/handle/10603/308994>(last visited on Jan. 30, 2021).

become crucial for determination of guilt,⁶ and protection of victims' rights⁷. Age has a direct bearing on human trafficking and smuggling, prostitution, sex tourism and child pornography. In civil matters, adoption, determination of custody and guardianship, capacity to contract, dealing financial and property-related transactions, eligibility for social benefits such as asylum-seeking and medical care, competitive sports to ensure athletes compete within appropriate age bands and grants for educational assistance are various domains where age diagnostics may potentially change the course of legal action.

Normally issues referred for age diagnostics are predominantly within juvenile age spectrum, but sometimes elderly age assessment may be required to ascertain eligibility for state-funded pension support or retirement age.⁸ In a country like India, mass scale ignorance and illiteracy of parents and poor maintenance of records obscure the problem since registration of birth of a child is not properly secured, resulting in the absence of credible legal documentation for ascertaining age. Forensic age assessment, being an inter-disciplinary procedure, assists the judicial system mainly when details of birth of a subject are either not recorded as per conventional methods or contested in the court on various grounds. This paper succinctly delves into various facets of age assessment, and also attempts to identify inherent limitations and their impact on administration of justice.

II Classification of age in legal realm

In various parameters, age may be classified as chronological (legal age), biological (physiological) and mental (intellect and maturity) age. Chronological age denotes number of years the subject (here human) has lived, but biological age or physiological ageing refers to how old a person appears. Biology of a person is conditioned upon his physiology, and so is his age. Chronological and biological age are interchangeably used despite the fact that medico-legal tests determines only biological ageing. Law, in *stricto sensu*, recognizes only chronological age, being irreversible and resistant to external factors. Mental or brain age denotes cognitive capacity and determined by various bio-

6 Indian Penal Code, 1860, ss. 82 to 86 under 'Chapter IV: General Exceptions' of the English Common Law doctrine of *doli incapax* (literally means 'incapable of doing harm') and *doli capax* ('capable of doing harm') deal with *mens rea* (guilty mind) to commit crime. *Doli incapax* connotes that a child is mentally incapable of understanding consequences of commission of an act/offence) and *doli capax* indicates that child is capable to intent for causing harm. A child below seven years in India, below nine years in Philippines, below 10 years in the United Kingdom, below 14 years in Italy and Germany, below 15 years in France is considered *doli incapax*.

7 *Eera through Manjual Krippendorf v. State (NCT of Delhi)* (2017) 15 SCC 133 : 2017 SCC OnLine SC 787 : (2018) 1 SCC (Cri) 588 : (2017) 3 MLJ (Cri) 452.

8 S. Ritz-Timme, H. J. Kaatsch, B. Marr'e, *et al.* "Empfehlungen für die Altersdiagnostik bei Lebenden im Rentenverfahren" 12 *Rechtsmedizin* 193-194 (2002).

markers such as telomere, DNA methylation,⁹ and generally calculated based on intelligence quotient (IQ).¹⁰ Chronological age, if known correctly, is free from ambiguity. However, both biological and mental age assessment hinges on several assumptions and probabilities, hence suffer from wide inconsistencies and ambiguities. Linking biological and mental age with chronological age is a utopian expectation, and lacks precision and admissibility at present.

III Provisions of age determination in the Indian legal system

As indicated earlier, age determination is an essential procedure, because minors (victim as well accused) have special privileges under law. Procedural latches may potentially be exploited in order to enjoy privileges; hence, age valuation becomes a decisive step in judicial proceedings. Provisions have been enacted in Indian legislation, as discussed below, for proving claim of minority; however, no specific provision is available for establishing age of the elderly. The JJ Act has prescribed procedure to determine age to adjudicate claim of juvenility of a wrong doer, but there is no specific legal roadmap for ascertaining minority of a victim. This legal conundrum was dealt in *Jarnail Singh v. State of Haryana*,¹¹ where the apex court held that “Even though Rule 12 [the JJ Rules 2007 under the JJ Act, 2000] is strictly applicable only to determine the age of a child in conflict with law, we are of the view that the aforesaid statutory provision should be the basis for determining age, even of a child who is a victim of crime. For, in our view, there is hardly any difference as far as the issue of minority is concerned, between a child in conflict with law, and a child who is a victim of crime”.¹² *Aadbaar* card has not been mentioned in the list of documents for age determination, but High Court of Delhi accepted it since veracity of age was not challenged by the defense during trial proceedings.¹³ However, *aadbaar* based age needs to fulfil legal requisites as illustrated under section 35 of the Indian Evidence Act, 1872.

9 J. H. Cole, R. E. Marioni, *et.al.*, “Brain age and other bodily ‘ages’: implications for neuropsychiatry” 24(2) *Molecular Psychiatry* 266–281 (2019).

10 L.L. Thurstone. “The Mental Age Concept” 33 *Psychological Review* 268-278 (1926).

11 (2013) 7 SCC 263 at 274 para 23: (2013) 3 SCC (Cri) 302 : 2013 SCC OnLine SC 507. *Also see: Mahadeo v. State of Maharashtra* (2013) 14 SCC 637; *State of Madhya Pradesh v. Anoop Singh* (2015) 7 SCC 773 : 2015 SCC OnLine SC 603; *Rajendran v. State represented by Inspector of Police, Ariyalur District* 2016 SCC OnLine Mad 33382; and *Reju v. State of Kerala* 2019 SCC OnLine Ker 2290 : 2010 Cri LJ (NOC 4) 2.

12 *Id.* at 274, para 23.

13 *Jabbar v. State (NCT of Delhi)* 2018 SCC OnLine Del 9327 para 7: (2018) 251 DLT 71 (DB): 2018 CriLJ (NOC) 233. *Also see: Parvati Kumari v. State of U.P.* Petition (Misc.) No. 13419 of 2018, High Court of Allahabad (DB), decided on Jan. 9, 2019 held that an entry of date of birth in *Aadbaar* is not conclusive.

Age estimation under the JJ Act of 2000 and 2015

As per section 3(1) of the Indian Majority Act, 1875 every person domiciled in India shall attain the age of majority on completion of 18 years and not before. Section 2(35) of the JJ Act, 2015 defines juvenile as a child below the age of eighteen years. Sub-rule 5 of Rule 22 of the JJ Rules, 2001 framed under section 68 of the JJ Act, 2000 dealt with age determination.¹⁴ Subsequently, these rules were amended, and Rule 12 of the JJ Rules, 2007 prescribed the procedure to determine age in order to establish juvenility.¹⁵ In *Lourdhe v. State represented by the Inspector of Police*¹⁶ the High

14 (2009) 6 SCC 681 para 11: (2010) 2 SCC (Cri) 1194. Also see: *Vicky Sao v. State of Jharkhand* 2008 SCC OnLine 510 para 8: (2008) 56(3) BLJR 2502: (2008) 69 AIC 911: (2008) 3 JLR 203 (HC).

15 R. 12: Procedure to be followed in determination of age.

(1) In every case concerning a child or a juvenile in conflict with law, the court or the Board or as the case may be the Committee referred to in rule 19 of these rules shall determine the age of such juvenile or child or a juvenile in conflict with law within a period of thirty days from the date of making of the application for that purpose.

(2) The Court or the Board or as the case may be the Committee shall decide the juvenility or otherwise of the juvenile or the child or as the case may be the juvenile in conflict with law, prima facie on the basis of physical appearance or documents, if available, and send him to the observation home or in jail.

(3) In every case concerning a child or juvenile in conflict with law, the age determination inquiry shall be conducted by the court or the Board or, as the case may be, the Committee by seeking evidence by obtaining-

(a) (i) the matriculation or equivalent certificates, if available; and in the absence whereof; (ii) the date of birth certificate from the school (other than a play school) first attended; and in the absence whereof; (iii) the birth certificate given by a corporation or a municipal authority or a panchayat;

(b) and only in the absence of either (i), (ii) or (iii) of clause (a) above, the medical opinion will be sought from a duly constituted Medical Board, which will declare the age of the juvenile or child. In case exact assessment of the age cannot be done, the Court or the Board or, as the case may be, the Committee, for the reasons to be recorded by them, may, if considered necessary, give benefit to the child or juvenile by considering his/her age on lower side within the margin of one year. And, while passing orders in such case shall, after taking into consideration such evidence as may be available, or the medical opinion, as the case may be, record a finding in respect of his age and either of the evidence specified in any of the clauses (a) (i), (ii), (iii) or in the absence whereof, clause (b) shall be the conclusive proof of the age as regards such child or the juvenile in conflict with law.

(4) If the age of a juvenile or child or the juvenile in conflict with law is found to be below 18 years on the date of offence, on the basis of any of the conclusive proof specified in sub-rule (3), the Court or the Board or as the case may be the Committee shall in writing pass an order stating the age and declaring the status of juvenility or otherwise, for the purpose of the Act and these rules and a copy of the order shall be given to such juvenile or the person concerned.

(5) Save and except where, further inquiry or otherwise is required, inter alia, in terms of section 7A, section 64 of the Act and these rules, no further inquiry shall be conducted by the court or the Board after examining and obtaining the certificate or any other documentary proof referred to in sub-rule (3) of this rule.

Court of Madras has observed that “The manner of determining age conclusively has been expressed in sub-rule (3) of Rule 12 extracted above. Under the aforesaid provision, the age of a child is ascertained, by adopting the first available basis, out of a number of options postulated in Rule 12(3). If, in the scheme of option under Rule 12(3), an option expressed is expressed in a preceding clause, it has overriding effect over an option expressed in a subsequent clause.”¹⁷ The court further mentioned extract of Rule 12(3) that “Yet again, if such a certificate is available, then no other material whatsoever is to be taken into consideration, for determining the age of child”.¹⁸

After the JJ Act, 2000 was repealed, section 94 of the JJ Act, 2015 provided preferential steps to determine age of the subject.¹⁹ Rule 18(iv) of the JJ Rules, 2016 clarifies that “For the age determination of the victim, in relation to offences against children under the Act, the same procedures mandated for the Board and the Committee under section 94 of the Act to be followed”. In 2019, the apex court observed that “Section 94(2)(i)

(6) The provisions contained in this rule shall also apply to those disposed of cases, where the status of juvenility has not been determined in accordance with the provisions contained in sub-rule (3) and the Act, requiring dispensation of the sentence under the Act for passing appropriate order in the interest of the juvenile in conflict with law.

16 2019 SCC OnLine Mad 5524. Also see: *Ram Karan v. State of Uttar Pradesh* 2019 SCC OnLine All 5757; *Valajindra Kaur v. State of Uttar Pradesh* 2019 SCC OnLine All 5846 : (2019) 109 ACC 340 : (2019) 203 AIC 884 : (2020) 110 ACC (Sum 44) 17; and *State (NCT of Delhi) v. Deepak* 2019 SCC OnLine Del 11574.

17 *Id.*, para 61.

18 *Ibid.* Also see: *Mahadeo v. State of Maharashtra* (2013) 14 SCC 637; (2014) 4 SCC (Cri) 306; 2013 SCC OnLine SC 662 at para 12 and 13; *Shah Nawaz v. State of Uttar Pradesh* (2011) 13 SCC 751.

19 JJ Act, 2015, s. 94 reads:

(1) Where, it is obvious to the Committee or the Board, based on the appearance of the person brought before it under any of the provisions of this Act (other than for the purpose of giving evidence) that the said person is a child, the Committee or the Board shall record such observation stating the age of the child as nearly as may be and proceed with the inquiry under section 14 or section 36, as the case may be, without waiting for further confirmation of the age.

(2) In case, the Committee or the Board has reasonable grounds for doubt regarding whether the person brought before it is a child or not, the Committee or the Board, as the case may be, shall undertake the process of age determination, by seeking evidence by obtaining:

(i) the date of birth certificate from the school, or the matriculation or equivalent certificate from the concerned examination Board, if available; and in the absence thereof;

(ii) the birth certificate given by a corporation or a municipal authority or a panchayat;

(iii) and only in the absence of (i) and (ii) above, age shall be determined by an ossification test or any other latest medical age determination test conducted on the orders of the Committee or the Board:

Provided such age determination test conducted on the order of the Committee or the Board shall be completed within fifteen days from the date of such order.

(3) The age recorded by the Committee or the Board to be the age of person so brought before it shall, for the purpose of this Act, be deemed to be the true age of that person.

indicates a significant change over the provisions which were contained in Rule 12(3)(a) of the Rules of 2007 made under the Act of 2000. Under Rule 12(3) (a)(i), matriculation or equivalent certificate was given precedence and it was only in the event of the certificate not being available that the date of birth certificate from the school first attended, could be obtained. In Section 94(2)(i) both the date of birth certificate from the school as well as the matriculation or equivalent certificate are placed in the same category”.²⁰ In case claims of age create confusion due to conflicting school certificates, an enquiry must be conducted by the court or the Board to take evidence for establishing credibility and authenticity of the documents to determine age.²¹ In *Arnit Das v. State of Haryana*,²² the court held that while deciding juvenility, a hyper technical approach should be avoided by the court.

In *Nirbhaya* gang rape case,²³ one accused was merely six months short to attain age of 18; and prosecutions’ plea to conduct forensic age assessment was rejected by the court holding that medical test cannot be permitted in presence of a positive evidence such as birth certificate. This observation paved the way to introduce section 15 of the JJ Act, 2015 to treat an adolescent between age 16 to 18 years in conflict with law as an adult in case of heinous crimes.²⁴ This special provision of law enables the Juvenile Justice Board to take the decision (optional), after conducting enquiry, to transfer criminal case to the court of sessions. This age group of a child is critical factor to be assessed with precision especially in the absence of credible birth records. Similarly, “... the age determination is very crucial for the child as the same has the potential to expose him to the possibility of being transferred to the Children’s Court to be tried as an adult.”²⁵

20 *Sanjeev Kumar Gupta v. State of Uttar Pradesh* (2019) 12 SCC 370 para 17.

21 *Ibid.* Also see: *Gajab Singh v. State of Haryana* 2019 SCC OnLine P&H 869; *Pargya Bharti v. State of Uttar Pradesh* (2016) 12 SCC 744 : (2017) 3 SCC (Cri) 819; and *Ramdeo Chanban v. State of Assam* (2001) 5 SCC 714 : (2001) SCC (Cri) 915 : AIR 2001 SC 2231 : 2001 Cri LJ 2902.

22 (2000) 5 SCC 488 at para 19: 2000 SCC (Cri) 962. Also see: *Bhola Bhagat v. State of Bihar* (1997) 8 SCC 720: 1998 SCC (Cri) 125; and *Santenu Mitra v. State of West Bengal* (1998) 5 SCC 697: 1998 SCC (Cri) 1381.

23 “Gang rape case: plea for bone ossification test turned down” *The Hindu* Jan. 28, 2013, available at: [https://www.thehindu.com/news/national/gang-rape-case-plea-for-bone-ossification-test-turned-down/article4353611.ece#\(last visited on Feb. 20, 2021\)](https://www.thehindu.com/news/national/gang-rape-case-plea-for-bone-ossification-test-turned-down/article4353611.ece#(last%20visited%20on%20Feb.%202021)).

24 JJ Act 2015, s. 2(33) reads: “heinous offences” includes the offences for which the minimum punishment under the Indian Penal Code (45 of 1860) or any other law for the time being in force is imprisonment for seven years or more.

25 *Lalu v. State of Bihar* 2019 SCC OnLine Pat 1697 at para 99. Also see: *Nardev v. State (NCT of Delhi)* 2019 SCC OnLine Del 10500; *State of J and K v. Shubam Sangra* 2019 SCC OnLine J and K 836; *Umda Devi v. State of Bihar* 2019 SCC OnLine Pat 1805; *Udhyanthi v. State of Tamil Nadu* 2019 SCC OnLine Mad 9061; and *Pawan Kumar Gupta v. State (NCT of Delhi)* 2019 SCC OnLine Del 11870.

Age assessment under the POCSO Act, 2012

Section 34 of the POCSO Act, 2012, empowers the court to determine age of the victim of sexual offence; however, no procedure is laid down in this piece of legislation. Thus, provisions of the JJ Act apply for age determination of the minor victim as discussed in pre paragraphs.²⁶ The apex court in *Sunil v. State of Haryana* held that it would be quite unsafe to base conviction on an approximate date of birth of the prosecutrix;²⁷ and it is the onerous duty of the prosecution to prove age of minority of victim under the POCSO Act. This legal requirement necessitates determination of age as a crucial factor to administer justice under this special legislation. In catena of cases, various high courts have exonerated accused of rape since prosecution could not establish age of prosecutrix below 18 years at the time of incident.²⁸ Indeed, if prosecutrix age could not establish her as a minor, such cases must be adjudicated under section 376 of the penal code.

*The cardinal principle of law including the POCSO Act demands that the best interest of the child must be protected.*²⁹ *Keeping in view the objectives of the POCSO Act, if doubt on age of prosecutrix is cast, the court must lean towards juvenility of the victim.*³⁰ However, as globally accepted doctrine of law, the benefit of doubt leans heavily *in favour of the accused*. The apex court held that any benefit of doubt, other things being equal, at all stages goes in favour of the accused.³¹ *High Court of Delhi in Shweta Gulati v. State (Govt of NCT of Delhi)*³² has deliberated whether “the issue of benefit of doubt in age of the victim estimated by bone ossification test is to go to the accused or the victim.”³³ The court held that in case a victim has no valid document of age, then benefit of doubt of age assessed through ossification test must be in favour of the accused.

26 *Supra* note 11.

27 *Sunil v. State of Haryana* (2010) 1 SCC 742 at para 26; (2010) 1 SCC. (Cri) 910. Also see: *Asbok Kumar Pariyar v. State of Sikkim* 2019 SCC OnLine Sikk 120; 2010 CriLJ 350.

28 *Bharat Bhushan Upadhyaya v. State of Jharkhand* 2019 SCC OnLine Jhar 133; and *Ganesh v. State of Maharashtra* 2019 SCC OnLine Bom 1204.

29 United Nations Convention on Child Rights (UN CRC) Art. 3 reads: In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration.

30 *State (NCT of Delhi) v. Varun S/o Bhagwan Dass* Case Id. No. 02403R0096782013 Delhi District Court (Patiala House), decided on Oct. 29, 2013.

31 *Triveniben v. State of Gujarat* (1989) 1 SCC 678; and *Maru Ram v. Union of India* (1981) 1 SCC 107.

32 2018 SCC OnLine Del 10448; (2018) 251 DLT 667.

33 *Id.* at para 13. Also see: *Rajak Mohammad v. State of Himachal Pradesh* (2018) 9 SCC 248 para 9 : (2018) 3 SCC (Cri) 753 : 2018 SCC OnLine SCC 1222; *State of Karnataka v. Bantara Sudhakara* (2008) 11 SCC 38 : (2008) 3 SCC (Cri) 955; *Shweta Gulati v. State (Govt. of NCT of Delhi)* 2018 SCC OnLine Del 10448 at para 14 : (2018) 251 DLT 667; *Jaya Mala v. Govt. of J and K* (1982) 2 SCC 538 at 541 at para 9 : 1982 SCC (Cri) 502 : AIR 1982 SC 1297; and *Ram Suresh Singh v. Prabhat Singh alias Chhotu Singh* (2009) 6 SCC 681 at para 3 : (2010) 2 SCC (Cri) 1194.

Thus, in child sexual abuse cases, if prosecutrix of nearly 16 years does not hold age proof admissible under law, she may not get justice under the POCSO Act since medical report on age assessment has variance of two years.³⁴ In this regard observation in *Sucha Singh v. State of Punjab*³⁵ is relevant where the apex court determined that “Exaggerated devotion to the rule of benefit of doubt must not nurture fanciful doubts or lingering suspicion and thereby destroy social defence. Justice cannot be made sterile on the plea that it is better to let hundred guilty escape than punish an innocent. Letting guilty escape is not doing justice according to law.”³⁶

IV Reliability of documents as proof of age

Birth certificate or education certificate being primary documentary evidence are reliable under the Evidence Act, 1872. However, mere submission of birth certificate, even with proven genuineness, is not enough to fulfil legal requirements. Section 35 of the Evidence Act, 1872³⁷ necessitates that source of information for recording the date of birth in records including matriculation certificate is important for ascertaining age.³⁸ In *Birad Mal Singhi v. Anand Purohit*,³⁹ “... To render a document admissible under Section 35, three conditions must be satisfied, firstly, entry that is relied on must be

34 In *State of Assam v. Md. Abdul Kalam* Special (POCSO) case no. 23 of 2015, decided on Mar.10, 2016 in Assam Report, at 78. The trial court observed: “If benefit of doubt of variation of two years in estimation of age on the basis of the Radiological report by Doctor is given to the accused in POCSO cases, no child who do not have a birth certificate and who is above the age of 16 years will get justice under the Provisions of the Protection of Child from Sexual Offences Act, 2012.” Also see: Implementation of The POCSO Act, 2012 by Special Courts: Challenges and Issues (Based on CCL-NLSIU’s Studies on the Working of Special Courts in Five States), Centre for Child and the Law, National Law School of India University, Feb. 2018.

35 (2003) 7 SCC 643. Also see: *Mangal Debbarma v. State of Tripura* 2019 SCC OnLine Tri 406.

36 *Id.* at para 20.

37 The apex court, in *State of Bihar v. Radha Krishna Singh* (1983) 3 SC 118, 136, 137 at para 35, has culled out three guidelines for admissibility of a document under section 35 of the Indian Evidence Act: (i) the document must be in the nature of an entry in any public or other official book, register or record; (ii) it must state a fact in nature or a relevant fact; and (iii) the entry must be made by a public servant in the discharge of his official duties or in performance of his duties especially enjoyed by the law of the country in which the relevant entry is kept. Also see: *Babloo Pasi v. State of Jharkhand* (2009) 6 SCC 681.

38 *Sanjeev Kumar Gupta v. State of Uttar Pradesh* (2019) 12 SCC 370. Also see: *Gajab Singh v. State of Haryana* 2019 SCC OnLine P and H 869; *Pargya Bharti v. State of Uttar Pradesh* (2016) 12 SCC 744 : (2017) 3 SCC (Cri) 819; *Ramdeo Chauban v. State of Assam* (2001) 5 SCC 714 : (2001) SCC (Cri) 915 : AIR 2001 SC 2231 : 2001 Cri LJ 2902. *Alamelu v. State of Tamil Nadu* (2011) 2 SCC 385; and *Satpal Singh v. State of Haryana* (2010) 8 SCC 714. In *Sushil Kumar v. Rakesh Kumar* (2003) 8 SCC 673 : AIR 2004 SC 230 at para 34, the apex court held that, “The Admission Register or a Transfer Certificate issued by a Primary School do not satisfy the requirements of Section 35 of the Indian Evidence Act”.

39 1988 Supp SCC 604 at 619, para 15: AIR 1988 SC 1796. Also see: *Raja Janaki Nath Roy v. Jyotish Chandra Acharya Chowdhury*, AIR 1941 Cal 41: 45 CWN 141: 193 IC 419.

one in a public or other official book, register or record; secondly, it must be an entry stating a fact in issue or relevant fact; and thirdly, it must be made by a public servant in discharge of his official duty, or any other person in performance of a duty specially enjoined by law. An entry relating to date of birth made in the school register is relevant and admissible under Section 35 of the Act but the entry regarding the age of a person in a school register is of not much evidentiary value to prove the age of the person in the absence of the material on which the age was recorded...” This legal requirement compels inherent incapacity amongst illiterate and marginalised families to produce proof of authenticity of date of birth furnished in the age records of their wards.⁴⁰ Such socio-legal hindrance becomes a roadblock in the delivery of justice both for minor victims and the accused.

V Forensic age estimation

Medical exam determines biological or physiological age which is presumed to correlate with chronological age. In true sense, chronological and biological age may not perfectly correlate because skeletal ageing process may vary among individuals.⁴¹ The scientific basis of forensic age assessment is predetermined temporal progression of defined developmental stage of various characteristics that are identical in all persons of a reference population. Forensic age determination in living individuals mainly focuses on: (a) assessment of dental development, (b) evaluation of skeletal maturation and (c) expression of secondary sexual characters.

Medical fraternity employs anthropometry, secondary sexual characters, radiological array (bone age and dental age⁴²) by capturing physiological changes *inter alia* synchronizing with the chronological age *per se*. X-rays of hands, panorama films of jaws, a thin slice Computed Tomography (CT) of medical clavicular epiphysis are various medical indices for age approximation. Indeed, forensic odontostomatology⁴³ for estimating dental age is more reliable since process of tooth development reflects less variability than other developmental features in ageing. Odontology entails assessment of forming dentition, radiography, histology along with physical and

40 *Supra* note 5 at 114.

41 S.P. Nawrocki, “The nature and sources of error in the estimation of age at death from the skeleton”, in K. Latham and M. Finnegan (eds), *Age Estimation of the Human Skeleton* 79 – 101 (Charles C. Thomas, Springfield, IL, 2010). Also see: Angi M. Christensen, Nicholas V. Passalacqua, Eric J. Bartelink, in *Forensic Anthropology: Current Methods and Practice*, (Academic Press, Elsevier: London, 2nd edn., 2019).

42 In ancient Rome, adolescents were permitted for induction in military services only after their secondary molars were fully emerged. In modern era, as a marker of age, tooth eruption was first used in England, when children without a second permanent molar were prohibited from working in factories under the Factory Act, 1837.

43 R. Endris, “Dental Age in Adults-A review of estimation methods” 23 *J Forensic Sci* 764-70 (1979). Also see: J. Seth, A. Agarwal, H. Aeran, Y. Krishnan, “Dental age estimation in children and adolescents” 10 *Indian J Dent Sci* 248-51 (2018).

chemical analysis.⁴⁴ The developmental characteristics of dental eruption, mineralization of third molars with an orthopantomogram,⁴⁵ analysis of ossification stages of medial clavicular epiphysis⁴⁶ have great relevance for age estimation.⁴⁷ Telomeres, the nucleotides on the ends of chromosomes, dictates how quickly cell ages and dies, hence length of telomeres became a steadfast probe for ageing and age estimation.⁴⁸ DNA methylation is yet another marker which serves a similar purpose.⁴⁹

Several techniques on age estimation may make tall claims, but are yet to be accredited and approved for scientific accuracy and legitimacy. These medico-legal tests in conjunction with statistical analysis for quantification of age may provide results with varying degree of uncertainty, and precision variance may be ± 2 .⁵⁰ A blind and mechanical view regarding age of a person cannot be adopted solely on the basis of medical opinion.⁵¹ However, age in younger children can be estimated with more accuracy compared to older children.⁵² Forensic estimation of age of adults suffers from more challenges than that of minors.

VI Legal issues with mental age

In the legal system, mental capacity has relevance for determining rights and liabilities, but mental age *per se* has no overt relevance. Interestingly, in the *Eera* case,⁵³ the issue

44 Schour and Masseler Method, Nolla's Method, Demirjian Method and Cameriere (Open Apex) Method.

45 A. Demirjian, H. Goldstein, JM Tanner, "A new system of dental age assessment" 45(2) *Hum Biol.* 211-27 (1973 May).

46 A. Schmeling, S. Schmidt, R. Schulz, D. Wittschieber, E. Rudolf. "Studienlage zum zeitlichen Verlauf der Schlüsselbeinossifikation" 24 *Rechtsmedizin* 467-474 (2014).

47 A. Schmeling, R. Dettmeyer, E. Rudolf, V. Vieth, G. Geserick, "Forensic Age Estimation: Methods, Certainty, and the Law" 113(4) *Deutsches Ärzteblatt International* 44-50 (2016).

48 Karen Anne Mather, Anthony Francis Jorm, Ruth Adeline Parslow, Helen Christensen, "Is Telomere Length a Biomarker of Aging? A Review" 66A (2) *The Journals of Gerontology: Series A* 202-213 (2011).

49 S. Horvath, "DNA methylation age of human tissues and cell types" 14: R115 *Genome Biol.* 1-19 (2013).

50 *Jaya Mala v. Govt. of J and K* (2009) 6 SCC 681 at 687; (2010) 2 SCC (Cri) 1194, the apex court held: "... However, it is notorious and one can take judicial notice that the margin of error in age ascertained by radiological examination is two years on either side." Also see: *Ram Suresh Singh v. Prabhat Singh* (2009) 6 SCC 681; *Jyoti Prakash Rai v. State of Bihar* (2008) 15 SCC 223; *Shweta Gulati v. State (Govt of NCT of Delhi)* 2018 SCC OnLine Del 10448.

51 *State of Madhya Pradesh v. Anoop Singh* (2015) 7 SCC 773; (2015) 4 SCC (Cri) 2008; 2015 SCC OnLine SC 603.

52 R. Cameriere, L. Ferrante, HM Liversidge, JL Prieto, H. Brkic, "Accuracy of age estimation in children using radiograph of developing teeth" 176 *Forensic Science International* 173-177 (2008). Also see: Douglas H. Ubelaker and Haley Khosrowshahi "Estimation of age in forensic anthropology: historical perspective and recent methodological advances" 4(1) *Forensic Science Research* 1-9 (2019).

53 *Supra* note 7. Also see: GK Goswami, "Forensic Law" LIII *ASIL* (2017) at 383-430.

of considering mental age for invoking provisions of the POCSO Act, 2012 was raised by a public-spirited petitioner on behalf of the mentally challenged victim of rape. Section 2(d) of the Act, 2012 defines a 'child' to mean any person below the age of 18 years. The petitioner argued that a mentally retarded or highly intellectually challenged person who has crossed the chronological age of 18 years must be included within the holistic conception of the term child. The petitioner contended that construction of the word 'age' must compositely include chronological and mental age. The victim in the extant case was 38 years old with mental age (functional age) of approximately six to eight years as certified by the medical experts. It was argued that various provisions under the special act are expressly designed to enable a mentally challenged victim child of sexual abuse. In the penal code several provisions have been enacted to protect or exempt a person from criminal liability purely on the basis of mental incapacity.⁵⁴ Despite strong arguments, the apex court turned down the prayer by observing that "stretching of the words 'age' and 'years' would be encroaching upon the legislative function."⁵⁵ The Bench further held, "...it is clear that viewed with the lens of the legislator, we would be doing violence both to the intent and the language of Parliament if we were to read the word "mental" into Section 2(1)(d) of the 2012 Act."⁵⁶ Indeed, the apex judiciary has not rejected the idea of considering mental age, but refused to interfere in the domain of legislature for law making.

VII Judicial observations on age assessment

As deliberated above, age determination remains a hotbed for adjudication. Parties interested in a *lis* contest to establish age to serve their purpose particularly when date of birth records are inadequate. The Supreme Court, in *Fateh Chand v. State of Haryana*,⁵⁷ held that the parents of the victim of rape are the most natural and reliable witnesses with regard to her age. In *Aswani Kumar Saxena v. State of Madhya Pradesh*,⁵⁸ the apex court held not to conduct robing enquiry, except "only in cases where those documents or certificates are found to be fabricated or manipulated, the court, the Juvenile Board or committee need to go for medical report for age determination".⁵⁹ The apex court

54 *Supra* note 6.

55 *Id.*, para 97.

56 *Id.*, para 147.

57 (2009) 15 SCC 543: (2010) 2 SCC (Cri) 676: AIR 2009 SC 2729: 2009 Cri LJ 3942 : (2009) 81 AIC 216 (SC) : 2009 (66) ACC 923 (SC). Also see: *Madan Mohan Singh v. Rajni kant* (2010) 9 SCC 209 at paras 18-22; and *State of Sikkim v. Sashidhar Sharma* 2019 SCC OnLine Sikk 154.

58 (2012) 9 SCC 750 : (2013) 1 SCC (Cri) 594. Also see: *Parag Bhatt v. State of U.P.* (2016) 12 SCC 744; and *Thanesh Kumar v. State of U.P.* 2019 SCC OnLine All 4583.

59 *Id.*, para 34.

in *Mukkarrab v. State of Uttar Pradesh*⁶⁰ succinctly dealt the issue of age determination by observing:

Time and again, the questions arise: How to determine age in the absence of birth certificate? Should documentary evidence be preferred over medical evidence? How to use the medical evidence? Is the standard of proof, a proof beyond reasonable doubt or can the age be determined by preponderance of evidence? Should the person whose age cannot be determined exactly, be given the benefit of doubt and be treated as a child? In the absence of a birth certificate issued soon after birth by the concerned authority, determination of age becomes a very difficult task providing a lot of discretion to the Judges to pick and choose evidence. In different cases, different evidence has been used to determine the age of the accused.

The apex court further held that radiological based x-rays ossification test for age determination is no doubt a useful guiding principle to know the span of age, but evidence is not of a conclusive and incontrovertible nature and it is subject to margin of error. Such medical opinion can, by no means, be infallible and accurate test to ascertain the correct number of years and days of a persons' life. However, if need be, it must be considered along with other circumstances. The court also observed that age of a person above 30 years cannot be determined with precision. In *Jodhbir Singh v. State of Uttar Pradesh*⁶¹ the apex court held that for matriculation certificate or mark sheet, the Board or court is not required to go for other evidence for age determination, and this view still holds for new Act, 2015.⁶² But, there should be no doubt on the genuineness and authenticity of the matriculation certificate or mark-sheet.⁶³

In *Subani v. State of U.P.*,⁶⁴ the apex court has placed reliance on the medical report of All India Medical Institute, New Delhi negating the age indicated in CBSE certificate. In *Nisha Naaz v. State of U.P.*⁶⁵ the issue was raised whether *Subani's* case overrules earlier judgments on age determination.⁶⁶ In *Priyanka Devi v. State of U.P.*,⁶⁷ the apex

60 (2017) 2 SCC 210 at para 11. Also see: *Bhagwat Munjabhan Hoge v. State of Maharashtra* 2019 SCC OnLine Bom 929; *Nawab Kazim Ali Khan v. Mohd. Abdullah Azam Khan* 2019 SCC OnLine All 5333; and *Surabuddin v. State of West Bengal* 2019 SCC OnLine Cal 2378 : (2019) 4 Cal LT 514, at para 45.

61 2013 (1) SC Cri. R36.

62 *Sher Khan v. State of Uttar Pradesh* 2019 SCC Online All 4389; (2019) 108 ACC 626.

63 *Ibid.* Also see, *Om Prakash v. State of Rajasthan* (2012) 5 SCC 201; 2012 (77) ACC 654 (SC).

64 2018 SCC OnLine SC 781. Also see: *Narendra Yadav v. State of U.P.* 2019 SCC OnLine All 4410; (2019) 107 ACC (Sum 75) 21 : (2019) 5 All LJ 456 : 2020 CrLj (NOC 79) 25.

65 2019 SCC OnLine SC 4062.

66 *Supra* note 11.

67 2018(2) ALJ 203. (Decided on Nov.21, 2017).

court further observed that there is no significant change brought about in age determination under the JJ Act, 2015 and the earlier 2000 and the Rules framed there under, in so far as weightage to medico legal evidence is concerned. The High Court of Allahabad in *Nisba Naaz* case held that "... The said decision [*Subani's* case] cannot be taken as a decision that overrules the earlier binding precedents which lay down the manner in which the age of a child is to be determined".⁶⁸

VIII Conclusion

In the realm of administration of justice, age estimation remains a crucial precept. In absence of legally admissible documentary age proof, age diagnostics becomes more challenging. It is a proven fact that poor and ignorant persons of adolescent age may be deprived of benefits of special provisions under laws due to lack of a credible system of age determination. In absence of universally agreed minimal standards with relation to data collection, forensic diagnostics for estimating age suffers heavily from variability and errors, and must not rely on a cookbook approach. The courts must act as alert gatekeepers for inexperienced and unscrupulous medico-legal experts whose overzealous opinion on age may do more harm than good. In forensic world, meta-data of diagnostics may be a crucial area for judicial scrutiny to know the reasoning behind expert opinion. This approach may truly establish a judge as 'gatekeeper' as enshrined under the *Daubert* standard.⁶⁹

The registration of birth must be made compulsory with proper maintenance of public records. Further, global attention is desired to prioritise medico-legal research with adequate funding to develop age diagnostics to ensure greater precision in age determination of people irrespective of their age profiles. Especially trained public functionaries of criminal justice system including police, prosecutors and judges must be deployed to deal with matters, if minors are involved as victims or person in conflict with law. Sensitivity and domain expertise are the foundation of justice while dealing with minors.

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68 *Supra* note 65 at para 15, and 19. Also see: *Indian Bank v. ABS Marine Products (P) Ltd.* (2006) 5 SCC 72.

69 *Daubert v. Merrell Dow Pharmaceuticals, Inc.* 509 U.S. 579 (1993): 113 S. Ct. 2786. The US Supreme Court held, "We recognize that, in practice, a gatekeeping role for the judge, no matter how flexible, inevitably on occasion will prevent the jury from learning of authentic insights and innovations. That, nevertheless, is the balance that is struck by Rules of Evidence designed not for the exhaustive search for cosmic understanding but for the particularized resolution of legal disputes."

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