

Case Study

Study of Adolescent/Teenage Pregnancy in Disputed Paternity Cases Received at Forensic Science Laboratory, Hyderabad, India

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ABSTRACT

Unmarried teenage pregnancy due to rape/sexual assault (R/SA) is a serious public health problem and it not only interferes with the education, personal development of the victim along with the born child. The data of forensic DNA Finger Printing on DP cases is a significant source in estimating the teen pregnancy and other social problems. A unique DNA profiling study was taken up for a period of 15 years (Jan 2000 to Dec 2014) to evaluate the role of age, community and occupation in committing the offence by offender/suspect/alleged father along with the status of the victim. The study revealed that, there are more civil cases in Andhra region compared to crime cases where as in Telangana region crime cases exceed the civil cases. The maximum percentage of victims i.e. 48%, belonged to labourer/agricultural labourers category, followed by Government related employees, Private employees, agriculture labourer, *Beedi* roller or servant maid/housekeeping work (each 4.17%) showing that all of them are of low socioeconomic status. The maximum DP cases were registered under the sections of Indian Penal Code (IPC) 417,376,420 and others and minimum cases under section of IPC 498A and others. The proportion of teen pregnancy due to SA/R is higher in the age group of 15 to 17 years in unmarried female and 20-22 years in offenders. Proper parenting is therefore the foremost criteria to reduce the R/SA victimization to promote a better and healthy future generation.

Key Words: Teenage Pregnancy, Disputed Paternity, DNA Profiling, Victim, Inclusion, Exclusion

INTRODUCTION

The birth and death rates influence the population dynamics and is essential to define and measure the health problems in an area. The knowledge of the existing data sources plays a vital role in formulating to improve health care strategies.

Pregnancy followed by birth is either due to marriage or consensual union. Occasionally, it could be due to sexual assault or rape. Unmarried teenage pregnancy due to rape/sexual assault (R/SA) is a serious public health problem and it not only interferes with the education, personal development of the victim but also the born

child. ^(1,2)

Forensic Science Laboratory (FSL) at Red hills, Hyderabad, India receives a wide variety of cases which not only includes children born to unmarried victims, aborted foetus or dead child sample of R/SA victims, but also the child / children of legally wedded couples who get divorced, leaving the mother and children to their destiny without being paid any maintenance by the father. These cases, termed as Disputed Paternity (DP), are received at FSL forwarded either by police or judicial authorities for DNA analysis to determine the biological father of the child/children.

This helps in criminal and legal proceedings.

The result of DNA profiling is distinct and fixes the offender /suspect / alleged father as the, or, as not the biological father of the child. Criminal cases are those wherein SA/R are registered under the sections of Indian Penal Code (IPC) and the cases forwarded by Family Courts are termed as Civil/Private DP cases.

The forensic DNA profiling data on DP cases are a significant source in estimating the teen pregnancy and other

social problems. Therefore, as our endeavour to bring out the facts regarding the category and reason for R/SA offence a DNA profiling study was taken up for over a period of 15 years (Jan 2000 to Dec 2014) and evaluated the role of age, community and occupation in committing the offence by offender/suspect/alleged father along with the status of the victim. This study is unique as there are no published data on disputed paternity as a social/health problem except the sporadic publication of some individual cases of DP. (3)

RESULTS

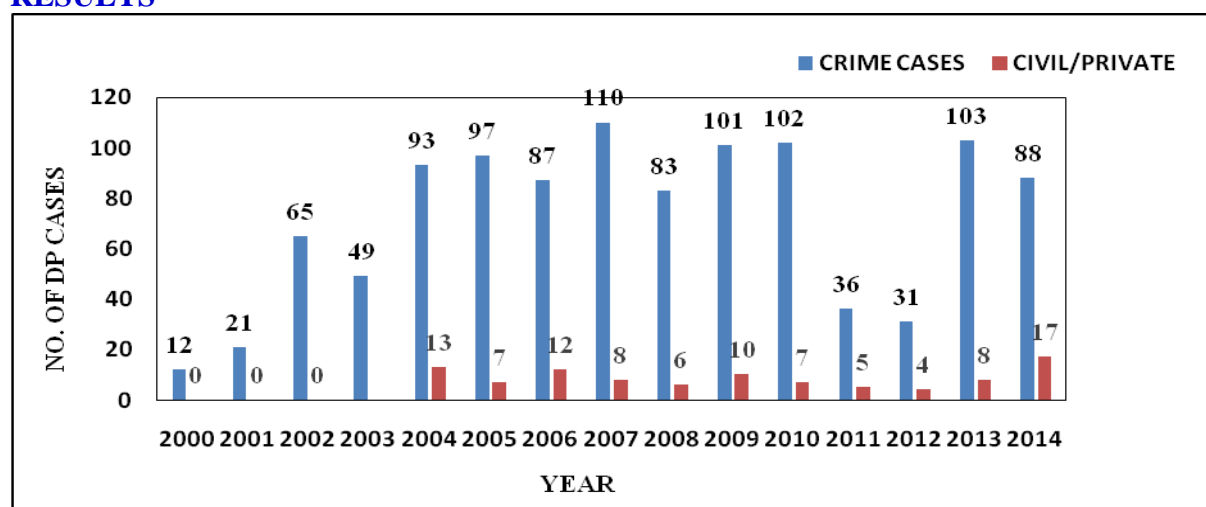


Figure 1: No. of crime and civil/private DP cases received each year from 2000 to 2014

The maximum numbers of criminal DP cases were reported in the year 2007 and that of civil/private DP cases in the year 2014. The minimum numbers of criminal DP cases were reported in the year 2000 and that of civil/private DP cases in the year 2012. No civil/private DP cases are reported till 2003. More than 100 crime DP cases were reported in the years 2007, 2009, 2010 and 2013.

Table-1: Percentage of Age distribution of victim and suspect/offender in crime cases of DP

S. No	Victim		Suspect/Offender	
	Inclusion Mean±SD	Exclusion Mean±SD	Inclusion Mean±SD	Exclusion Mean±SD
12-14	5.38±4.0	9.38±7.69	0	0
15-17	27.0±6.44	28.31±12.0	2.15±1.95	4.31±6.49
18&19	20.69±5.92	23.15±15.80	6.23±3.19	9.85±11.13
20-22	23.76±4.42	17.31±11.20	26.31±5.9	31.08±9.40
23-25	9.54±2.44	8.69±9.21	27.54±7.69	19.38±9.26
26-30	6.38±3.71	4.23±4.44	18.31±4.29	13.54±7.33
31-40	2.92±1.85	2.61±3.01	11.31±5.71	9.31±5.4
≥41	0	0	4.54±3.71	5.38±3.82

The age of the victim in criminal DP cases is below 25 years in 90% cases and 30% were less than 18 years. When the victim's age is less than 18 years, the case gets registered under Protection of children against sexual offences (POCSO). In case of suspects, 80% were in the age group of 20 years to 30 years.

The age of victims starts from 12 years and that of suspect/offender starts from 15 years onwards in the reported cases. The victim inclusion is conditional to, if the version of the mother, accuses a man of being the father of her child is true. The victim exclusion is conditional to, if the version of the mother, accuses a man of being the father of her child is untrue or false. The result of DP with respect to suspect/offender is defined as inclusion when the suspect/offender is the biological

father of the said child/children, and exclusion when the offender/suspect is not the biological father of the said child/children. The maximum victim inclusion and exclusion cases were reported in the age group of 15-17 years. The maximum suspect/offender inclusion cases were reported in the age group of 23-25 years and that of exclusion in the age group of 20-22 years. No DP cases were reported above 41 years of victims either in inclusion or exclusion, similarly no cases were reported among suspects/offenders in the age group of 12-14 years either in inclusion or exclusion.

Table-2: Percentage of age range of mother, child and father in Civil/Private cases of DP

S. No	Year	Mother's age (years)	Child's age	Alleged Father's age (years)
1	2004	24-51	10 months - 25 yrs	20-66
2	2005	25-33	2 months - 27 yrs	32-50
3	2006	19-41	1 month -13 yrs	22-50
4	2007	23-63	1.5 yrs -45 yrs	30-67
5	2008	20-32	1.5 yrs -11 yrs	27-47
6	2009	19-39	9 months- 22 yrs	25-49
7	2010	22-55	10 months- 30 yrs	25-62
8	2011	19-36	1 yrs -10 yrs	23-53
9	2012	23-28	2 yrs -7 yrs	25-40
10	2013	20-36	1 yrs -20 yrs	21-70
11	2014	20-43	1 yrs-29yrs	25-50

In civil/private DP cases, the age of mother falls in the range of 19 to 63 years, the age of the child is from 1 month to 45 years and the alleged father age is from 20 years to 70 years. This shows that the dispute may be in early marriage days to very late after marriage, which psychologically affects the child.

In civil cases either victim or alleged father are the petitioners. When the victim is the petitioner, she approaches the court to prove the birth identity of her child, for gaining maintenance, share in the assets or might be fed up with her husband due to various reasons. When the alleged father is the petitioner, he approaches the court to clear the doubt on her loyalty/illicit relation.

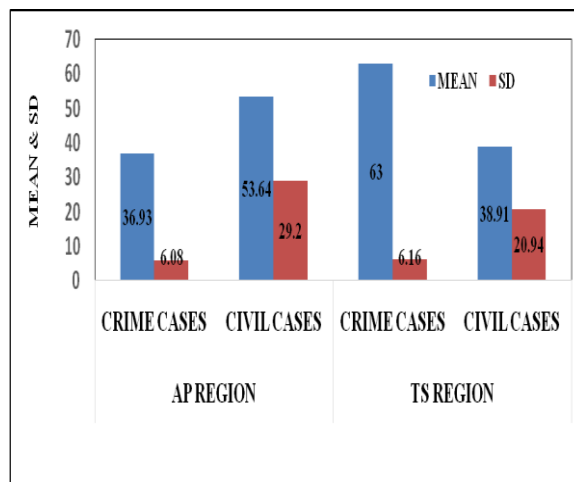


Figure 2: Percentage of total cases of DP crime (2000 -2014) and DP civil/private (2004 -2014) received from Andhra and Telangana regions

Percentage of civil cases in Andhra region are more compared to crime cases where as percentage of crime cases in Telangana region are more compared to civil cases. Crime cases of Telangana region exceed that of Andhra region, where as civil cases of Andhra region exceeds civil cases of Telangana region.

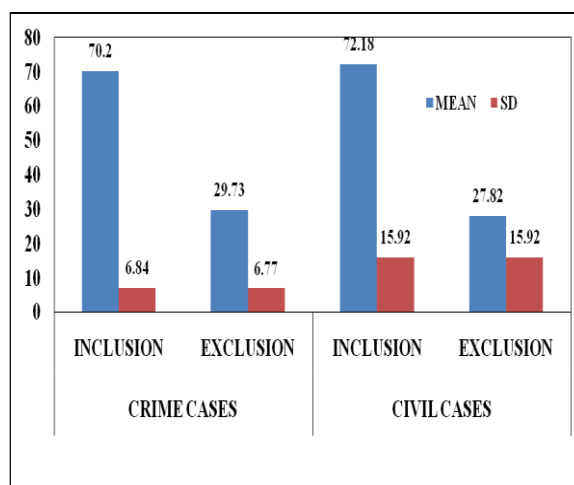


Figure 3: Results obtained in percentage of total DP crime cases (2000--2014) and civil / private cases (2004—2014)

The percentage of DP inclusion is more in both crime and civil cases compared to the exclusion. The percentage of inclusion in civil cases slightly exceeds the inclusion of crime cases. The percentage of exclusion in crime cases slightly exceeds the exclusion of civil cases.

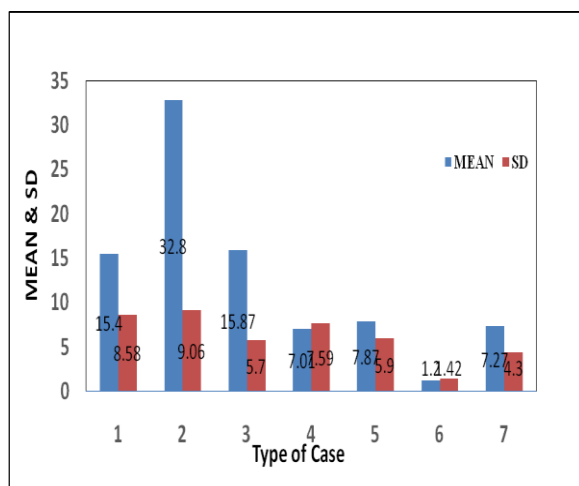


Figure 4: Crime cases of DP registered under various sections of Indian law

- 1) U/S 376 IPC /376 & others: Sexual assault /rape section
- 2) U/S 417, 376, 420 & others: With false promise of marriage & maintaining sexual relationship, cheated by not marrying therefore sexual assault or rape.
- 3) U/S 417, 420 & others: Maintain physical relationship with a false promise of marriage and denying the relationship and cheated
- 4) U/S 417 & others: With a false promise of marriage used physically

- 5) U/S 420 & others: Cheated by refusing the relationship and not marrying
- 6) U/S 498 A & others: Harassment for more dowry
- 7) U/SSC/ST POAA: Cases with SC/ST POAA act where the victim belongs to SC/ST.

The crime cases of DP registered under various categories of Indian law is as given in figure 4. The victims are mostly unmarried in all the categories except in dowry harassment cases and suspected fidelity of the spouse. In major DP cases 32.8%, the offenders used victims physically, by promising to marry and then deny the relationship after pregnancy. In around 15% of the SA/R cases resulted in pregnancy and continuing the physical relationship after pregnancy without marrying.

The maximum DP cases registered were found to fall under the section 417, 376, 420 & others and minimum under section 498A and others. The decreasing order of registered DP cases under various sections of Indian law is in the order of 2 > 3 > 1 > 5 > 4 > 7 > 6.

Table 3: Disputed paternity crime cases percentage of occupation of accused/suspect* and victim**

Occupation	Accused/suspect* Mean ±SD	Victim** Mean ±SD
Agriculture	18.5 ± 9.35	7.25 ± 4.86
Agriculture labourer	17.42 ± 10.60	47.92 ± 12.77
Private employees	12.5 ± 7.10	8.25 ± 6.08
Students	11.17 ± 6.49	2.17 ± 2.29
Government related employees	8.17 ± 4.30	12.46 ± 9.59
Driver of vehicle	14.83 ± 10.30	--
Business/self-employee/caste profession	9.58 ± 7.02	--
Skilled worker	4.0 ± 6.61	--
Beedi roller	--	4.17 ± 6.04
Housekeeping on hire or maid servant	--	4.17 ± 3.27
Others	3.92 ± 4.12	--

*The results represented 32.67 ± 11.54 (Mean ± SD) of total number of cases

**The results represented 35 ± 12.12 (Mean ± SD) of total number of cases

The occupation of the victim and offender in DP cases is as shown in Table 3. The maximum percentage of victims i.e. 48% are found to fall in labourer / agricultural labourers category, followed by Government related employees (12.46 ± 9.59), Private employees (8.25 ± 6.08), agriculture labourer (7.25 ± 4.86), Beedi roller or servant maid / housekeeping work

(each 4.17%) showing that all of them are of low socioeconomic status.

The occupation of offender varies and they come from lowest income group i.e. labourer / agricultural labourer, followed by driver of the vehicle, by private employees and Government related employees. The above results show that most of the victims and offender belong to the same category of occupation.

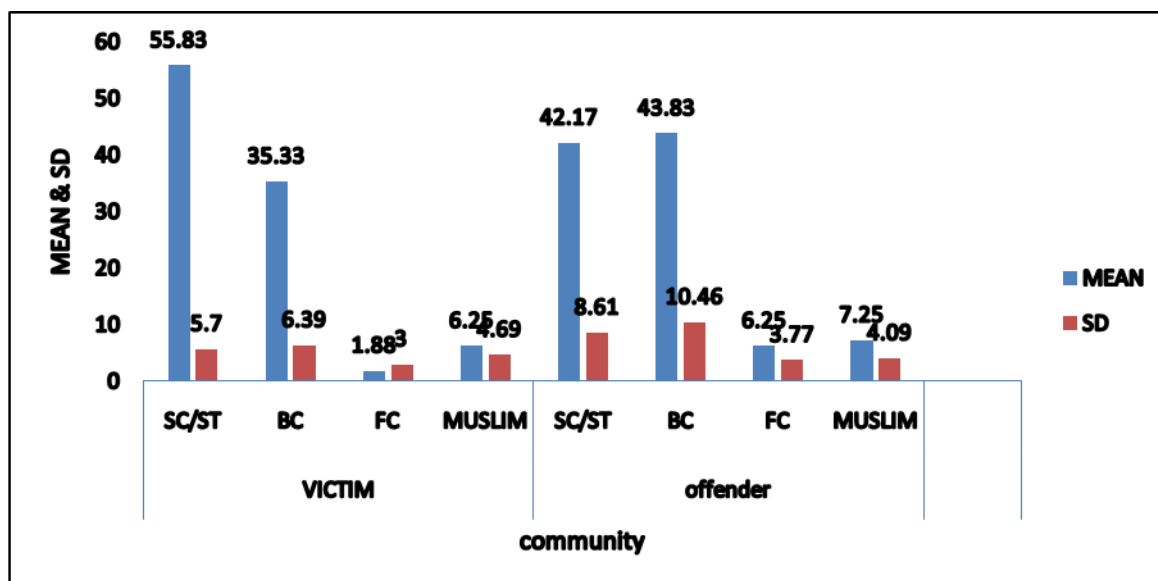


Figure 5: Percentage of DP crime cases in victim* and offender** community/religion from 2003-2014

*The results represented 62.08 ± 6.73 (Mean \pm SD) of total number of cases

**The results represented 61.83 ± 6.74 (Mean \pm SD) of total number of cases

The community / religion of victim and offender is given in fig 5. The cases of DP reported from Hindu community were more than 90% and Muslim were < 10%. In case of victims, >50% belong to SC/ST, BC'S around 35% and FC victims are <5% only. However, the offenders belonging to SC/ST & BC community are almost equal. The offenders of FC are more than the FC victims. The maximum victims belonged to the community of SC/ST and minimum are found in FC. Maximum offenders belonged to BC community and minimum in FC.

There are some unusual crime cases of DP received during the period of study are as in tables 4 and 5.

Table 4: The results of DNA profiling where the pregnant victim belonged to physically and mentally challenged from 2000 to 2014

No. of cases reported	Inclusion	Exclusion
23	9	14*

*Two cases where 2 suspects were sent and 2 cases where 3 suspects were sent and all the suspects were excluded.

The number of exclusions are more than 50% where the pregnant victims in criminal cases were physically and mentally challenged, showing their proneness to R/SA.

Table 5: The result of DNA profiling where more than one suspect/offender sent for DNA profiling during 2000-2014

No. of cases	NO. of offenders/suspect	Result of DNA profiling
13	2	Out of 18 cases received, exclusion of all offenders in 11 cases is noticed. Inclusion of one offender and exclusion of other suspects is observed in the remaining 7 cases.
4	3	
1	9	

More than one offender sent and exclusion of paternity result in criminal cases of DP also may indicate the victims might be having more than one sexual partner.

DISCUSSION

Developed countries have more than one national/state data sources to assess the causes of fatal and non-fatal injuries which may be either natural or accidental. (1)

However in developing countries there is a gross underestimation of recorded number than the actual injuries and deaths due to lack of documentation at different sources. (2, 4)

For unnatural causes of injuries and deaths, the only published data source is National Crime Records Bureau (NCRB)'s annual reports. (5-7) In India family and health surveys are done over a period of 10

years by a voluntary organisation, where they also address about child marriages and teenage pregnancy, their cause and prevention. ⁽⁸⁾ However the studies on teenage pregnancy due to SA/R or other crimes such as cheating etc. of unmarried female and civil disputes are not reported by either NCRB or family and public health survey as is done by other developed countries. ⁽⁹⁻¹¹⁾

The proportion of teen pregnancy due to SA/R is higher in the age group of 15 to 17 years in unmarried female and 20-22 years in offenders similar to general R/SA victim and offender cases. ⁽¹²⁾

Child marriages are seldom reported to FSL under Prevention of Child Marriage Act (PCMA), and the social workers strive to prevent child marriage and the victim is tested to rule out child abuse. Clea Sarnquist Dr et al., has shown, that intervention programme based on actual estimates at high school level has reduced the adolescent pregnancy in Nairobi. ⁽¹³⁾

Comparatively, more R/SA victims were students followed by labourer/coolie, but pregnant DP victims belonged to labourer/agriculture labourer (47%) followed by students, which is only 12%. The higher rate of pregnancies in DP victims might have occurred, may be, due to lack of knowledge of reproductive health care and contraception. ⁽¹⁴⁾

Offenders with an occupation of driver of a vehicle form a significant proportion i.e., 14% in DP pregnancies but are highest in general R/SA cases 42.5%. ⁽¹²⁾

The community of victim and offender in R/SA cases and DP pregnant victims is similar and number of FC pregnant victim in DP cases is minimal compared to FC offender.

The minimum age of mother in civil/private cases is 19 showing that it could be a child marriage.

Even today in rural India Dalit, SC/ST women are comparatively in low socioeconomic level due to lack of education and poverty leading them to work

in fields and construction sites in order to earn, thus easily victimizing them.

The data does not include whether the marriages are approved by the family or illegal elopement or secret marriages by marrying in the temple by tying mangalasutra or exchange of garlands. A small proportion of pregnancy cases due to rape are reported for serological examination. Our study on R/SA cases that ended up in this kind of marriage was found to be around 8 percent of the total cases studied. ⁽¹²⁾

Cases of R/SA victims who died by committing suicide need to be studied separately, since there is no proper amplification of DNA due to decomposition of the foetal sample or even if amplified does not match in a few cases as the deceased might not have revealed the suspects identity.

CONCLUSION

DNA Profiling has changed the forensic genetics and is widely accepted in medico-legal cases thus becoming conclusive evidence by providing the best platform for unambiguous exclusion of the guiltless suspects.

It can further be concluded that, the cases received from Telangana and Andhra regions comprised of both civil and criminal, contained maximum number of victims that belonged to SC/ST category attending labourer/agricultural work due to low socioeconomic status are of adolescent age group (12-19 years). Proper parenting is therefore the foremost criteria to reduce the R/SA victimization to promote a better and healthy future generation. The Govt must focus on appropriate implementing measures to decrease the dropouts in the school and provide safety environment for prevention of R/SA offences.

The DNA profiling data of disputed paternity at state and national level if properly documented can give an insight into the teenage pregnancies due to R/SA or cheating or offences of similar type, which can to some extent at least eradicate further

victimization of the victim. Other problems related to child/marital disputes are due to ill psychological feelings and fidelity of spouse and extra marital affairs are exemplified by results of criminal as well as civil/private DP cases.

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