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**DNA-based parentage testing in forty cases of statutory and aggravated rape: Some social issues**

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This study examines forty cases of paternity testing that was performed in incidents of statutory and aggravated rape. Thirty one cases of statutory rape were selected on the basis that the tested mothers were below the age of 16yrs at the time of conception, and nine cases of aggravated rape were selected because the tested mothers were physically or mentally handicapped. The objective of this study was to observe trends in the parentage testing process for these two offences, and to examine the DNA typing data for possibilities of consanguinity between parents, which is indicative of unreported cases of incest.

These cases were referred to us by Courts in 13 districts. In the statutory rape cases, the age of the mother ranged from 11yrs to 16yrs at the time of delivery with an average of 14.7yrs. The age of the father ranged from 15yrs to 56yrs with an average of 28.8yrs. Of the forty cases, 25 (62.5%) proved to be positive in the paternity test, and 15 (37.5%) proved to be negative. A negative result indicates that the accused is not the biological father. By extension, it also means that the actual father/rapist was not accused, and was not brought to trial in that case.

We further examined the DNA data from the cases which gave negative results. We observed that of the degree of homozygosity in the child (3.0) was greater than in the overall average (2.6) for a random Sri Lankan. Further, we observed that the genetic similarity between mother and child in these cases was 3.3, which is greater than the national average (2.3) for a mother-child duo in the Sri Lankan population. A greater degree of homozygosity in the child and genetic similarity between the tested mother and child is strongly indicative of consanguinity between the actual parents of the child. From the above observations, it was found that there was a distinct possibility that in these cases, the rapist was a close family relative, and that another person had been falsely accused of the offence. In the above cases, we informed the Court of the possibility that the actual father may be a blood relative of the mother. However in all such cases, we were not requested to perform any further tests. As a consequence, in these cases the offence of statutory rape which is also incest went unprosecuted, and the offender was not even brought to trial.

While a positive DNA test is very good proof of statutory and aggravated rape, a negative DNA test result must be further investigated for the underlying cause, which is likely to be the grievous offence of incestuous statutory rape, and all possible suspects must be subjected to testing in order to determine the identity of the rapist.

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