

DNA-based parentage testing as a social phenomenon in Sri Lanka

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DNA typing is the characterization of individuals at the level of the hereditary material, DNA. It has become recognized as an accurate and powerful method of identifying individuals from biological material, as well as establishing family relationships. Since January 2003, 191 DNA tests have been performed by Genetech for the determination of parentage as a provider of DNA typing services in Sri Lanka. The objective of this study was to examine some trends in parentage analysis in Sri Lanka.

Of the 191 parentage tests performed, 174 (91%) involved the testing of mother, child and putative father, while 12 tests were only for father and child and 5 tests were performed to test for maternity. The majority of the cases (81%) were referred to Genetech by Courts of Law and 36 tests (19%) were performed on the request of private individuals. Of the paternity tests, 140 (73%) gave a positive test result, thereby establishing the child's paternity. However, in 51 cases (27%) the test resulted in negative paternity, indicating that the mother of the child either falsely accused the putative father or that she was not aware of who the father might be. In such cases, the identity of the child's true father remained unknown.

The examination of the reasons for parentage testing revealed that the majority (62%) of paternity tests were performed for child maintenance and custody, for children born out of wedlock. The next most common reason for testing (18%) was to prove adultery in divorce cases. Statutory rape and child abuse which have resulted in pregnancy accounted for 9 paternity tests. Two tests were performed to prove incest. Immigration issues were the reason for testing in 10 cases, 4 of these involved the matching of legally adopted Sri Lankan children who are living abroad, with their biological mothers. In 4 cases DNA typing was performed to determine the parentage of individuals involved in testamentary disputes. In 2 cases, DNA tests were performed because the horoscopes of the putative father and the child did not match. Maternity tests were performed in cases of illegal adoption, baby stealing and hospital mix-ups.

Parentage tests were requested by Courts of Law from 18 districts of Sri Lanka. The Anuradhapura district accounted for the most number (25), about half of which involved military service personnel. The next most common were Jaffna and Kandy districts with 22 cases each, and the number of cases from Colombo and Gampaha were significantly low at 9 and 7 cases respectively.

The age of the mothers in these tests ranged from 16 to 53 and averaged at 28.7 years. The putative fathers ranged from 19 to 70 with an average of 33.4 years. The majority (135) of the children were below 5 years of age, and 105 of the tested children were male and 95 female. In conclusion, it can be said that there is a growing reliance on a modern scientific method for resolving disputed parentage in Sri Lanka. The reasons for testing, the geographical distribution and age structure of the tested persons is reflective of trends in social and criminal behavior in Sri Lanka.

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