

POINT OF VIEW

Strengthening Forensic Anthropology in Sri Lanka: The way forward

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ABSTRACT

Forensic Anthropology is the application of the science of physical or biological anthropology to the legal process. The contribution of this field to the death investigation system in Sri Lanka has a long history. However, for the death investigation system to get the benefit of global advances in this field, it needs to be developed into a subspecialty. This can only be achieved through development of human resources, infrastructure and by establishing population-specific references.

Key Words: Forensic Anthropology, Sri Lanka, death investigation.

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INTRODUCTION

Forensic Anthropology (FA) is an applied area of physical (i.e., biological) anthropology which specifically uses science, methodology, and technology of physical/biological anthropology and related fields to help address medicolegal issues, such as personal identification and circumstances surrounding death¹. The traditional perspective of FA includes recovery and analysis of human remains². The analysis of human remains includes separation of human remains from similar objects, estimation of time since death, determining the taphonomic history, building the biological profile, recognizing the features that may assist in identification and determination of cause and manner of death where possible²⁻⁵. Thus, FA plays a significant role in routing autopsy investigations (when the identity of the remains is an issue), in identification of victims of mass disasters^{6,7} and in human rights investigations^{8,9}. In the modern era FA also occasionally extends to the investigation of living individuals^{2,3}.

History of forensic anthropology in Sri Lanka

The formal death investigation system in Sri Lanka has a history that goes back to 1883¹⁰. Nevertheless, the initiation of the use of anthropology in death investigation in Sri Lanka is not clear. In 1954, research conducted on age estimation from bone development was published in the *Journal of Criminal Law and Criminology*^{11,12}. This is considered the 1st documented anthropology research study in Sri Lanka. The case of *E. Alfred de Zoysa vs The Queen* (75 NLR 534) which is commonly known as the Kalaththawa murder case highlights the use of anthropology in forensic investigations, which was decided in 1960s¹³. FA has made a significant contribution in the exhumations of mass graves presumed to be from the 1980-2009 civil war¹⁴ and in the identification of deceased from recent natural disasters¹⁵.

In the absence of formally trained Forensic Anthropologists in the Medico-Legal Service, Forensic Medicine specialists are responsible for providing the “anthropology opinion” in death investigations in Sri Lanka. These Forensic Medicine specialists obtain a basic knowledge in FA during their 5-year postgraduate training in Forensic Medicine¹⁶ and by participating in various workshops and short-term training programs conducted by renowned Forensic Anthropologist around the world (Personal experience). The first such workshop was conducted in Colombo by Professor Clyde Snow in 1993 (Personal communication).

In 2017, the Postgraduate Institute of Medicine (PGIM) in Sri Lanka identified FA as a subspecialty in Forensic Medicine¹⁶. Since then, the PGIM allows post-MD (Forensic Medicine) trainees to select FA as a subspecialty and undergo specialist training in FA during their local and overseas post-MD training.

The ministry of health in Sri Lanka identified the 1st cadre position for a Forensic Anthropologist in 2018 (Ministry circular of appointing the Forensic specialist to the unit¹⁷). This paved the way to establish the 1st FA Unit at the Institute of Forensic Medicine and Toxicology (IFMT).

The way forward

Even though FA has contributed greatly to the death investigation system in Sri Lanka it has not been considered as a separate specialty in forensic medicine training since of late. For FA to be developed into a subspecialty the following is suggested.

1. Human Resource development
2. Infrastructure development
3. Conducting population-based research

Human resource development

The qualifications that are required to become a Forensic Anthropologist vary from country to country and depend on the Medico-Legal system of the country. In the United States, ABFA (American Board of Forensic Anthropologists) certified Forensic Anthropologist shoulder the responsibility of practicing FA¹. However, in European countries, the training is dishomogeneous³. In Sri Lanka the Forensic Medicine Specialists are held responsible for providing FA opinion in death investigations. Hence, they need to have a sound knowledge in FA. The post-doctoral FA training program recently introduced by the PGIM offers the opportunity for Forensic Medicine specialist to obtain a comprehensive training in FA. Trainees of this program will have at least one year of exposure to FA at a recognized Centre before being board certified as a specialist in Forensic Medicine with special interest in FA¹⁶. This development has been recognized by the PGIM as an effective pathway to produce qualified experts in this field, and its continuation is essential for further development of the specialty. However, such training does not result in the award of a postgraduate degree in FA and is limited to post-MD (Forensic Medicine) trainees. The recently approved postgraduate Diploma in FA appears to be a sustainable solution for both the issues i.e., professional training and certification¹⁸.

Moreover, the diploma is open to any medical officer and it opens to a wider community once it's implemented.

The Sri Lanka Medical Council (SLMC) being the regulatory body of the medical profession, issues licenses to qualified Forensic Medicine Specialist and maintains the specialist registries. Those who have successfully completed the said Postgraduate Diploma will be able to register their qualification with the SLMC. Hence the Postgraduate Diploma would result in qualified as well as certified Forensic Anthropologist in Sri Lanka.

A certification/licensing for FAs would not only give due recognition to the specialization and specialists, but would also act as a gatekeeper and help maintain standards of the profession and professional training

Infrastructure Development

FA is partially a laboratory-based science, and each practitioner requires appropriate tools and a suitable workplace to conduct proper analysis of remains. The FA unit at the IFMT is the only FA unit that has been established within the health sector thus far. Therefore, cases from all corners of the country are referred to the FA unit at the IFMT for analysis. The unit is equipped with basic equipment such as casts (both adults and sub adults), calipers, osteometric boards etc. However, the unit needs to be upgraded with other necessary equipment such as microscopes, mandibulometer, etc. To facilitate postgraduate and undergraduate training, a documented skeletal collection consisting of complete skeletons, fragmented skeletons, skeletons with trauma and bone pathology is essential. Currently the unit can meet the demands. Nevertheless, decentralizing the service should be considered in the long-term. This will not only reduce the burden on the centre but also provide easy access for clients, and may reduce the cost and the waiting time for reports.

Conduing population-based research

Conducting research is an integral part of the development of a discipline. In Sri Lanka, a few population-based studies in FA have been conducted. The method developed to estimate stature is one such study¹⁹. As most anthropological indicators are population-specific, to perform a reliable Forensic Anthropological assessment in a medico-legal case, population-based references are

essential, and such can only be established through population-based studies.

CONCLUSION

FA plays a significant role in the medico-legal death investigation process. To maximize the application of FA in forensic cases, it is necessary to have qualified practitioners. Without sufficiently equipped laboratories, an accredited training or proper research, high-quality standardized services cannot be provided. In the absence of population-specific reference data, a reliable opinion with regards to the biological profile cannot be expressed in all medico-legal cases. Therefore, human resource development, infrastructure development and establishing population-specific references are the main areas that need to be focused on in strengthening the FA capacity in Sri Lanka.

CONFLICTS OF INTEREST

There are no conflicts of interest.

ETHICAL ISSUES

None

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