

## ESTABLISHING LIP PRINT ANALYSIS / CHEILOSCOPY IN SRI LANKA AND IT'S FORENSIC USE

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External surface of the lip has many elevations and depressions forming a characteristic pattern called lip prints, examination of which is referred to as cheiloscropy or lip print analysis. The approach is very similar to that of fingerprint analysis. The pattern of lip print is unique to an individual: the very factor used in forensic personal identifications.

The biological phenomenon of systems of furrows and prints on the red part of the human lips was first noted and described by anthropologist R.S. Fischer, in 1902. However up until 1950s they were not assumed to have any forensic use.

Y.T Suchihashi and T.Suzuki examined persons lip prints at the department of forensic odontology at Tokyo university and established that the arrangement of lines and prints on the red part of the human lips is individual and unique for each human being. Since then, this technique has been used worldwide in order to incriminate or discriminate a suspect from a crime when and where lip prints were available. These studies motivated crime scene investigators to look for lip prints in addition to finger prints in crime scenes.

So far, in Sri Lanka, there is neither a case report involving a lip print nor there is any research publication concerning lip prints. It may not be because there were no lip prints in our crime scenes that they were not recorded, it may be that the officers were unaware of an existence of such a technique and were unaware of detecting or the use of such.

Lip prints can be found literally in any object in contact with the lips. Most commonly in glasses, cigarettes, food items etc. However one needs extra efforts to make lip prints visible. There are several techniques to visualize a lip print similar to those used to visualize fingerprints. Further, there has been instances where lip prints could be directly used as they appeared colorful with lipstick in clothes!.

There have been many forensic case work elsewhere, where the lip print evidence were used in court room. However unfortunately to date this technique was not available for Sri Lanka.

The results present in this paper are preliminary findings of an ongoing study. A sample of 25 volunteers 15 males and 10 females were instructed to imprint their lip prints in a white color A4 paper kept horizontally in a laboratory table. They were given instructions as to how the impression should be made. The technique used here was the simple ölip stickö method to obtain the lip print.

Once the prints were made they were analyzed visually and with the use of a hand lens for their lip print type. The lip print types were identified and documented.

This study not only establishes initial idea about lip print patterns in the Sri Lankan population but also establishes the method for forensic use. This study continues with a larger sample at present.



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### Identified Lip print patterns in the sample

#### References

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