

Pattern of Lip Fingerprints of Students in SDN 043945 Pernantin

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Abstract- The number of mass disasters in Indonesia has increased in recent years, both caused by nature and by human negligence. The importance of the role of identification has been regulated in Law no. 36 of 2009 article 118, the first paragraph, that every doctor must be willing to assist the victim identification process if requested by the investigator. Lip print is a pattern in the form of gaps or fissures found on the surface of the lip mucosa. The study of lip print patterns is called Cheiloscropy. Lip prints are used for individual identification because they have unique and stable properties. Lip prints have many advantages that can be used in forensic identification. But unfortunately, lip prints are still rarely used in the forensic identification process and even the privilege of lip prints is still rarely heard, especially in Indonesia. Whereas lip print is an identification technique that is simple, inexpensive, and easy to use to determine a person's identity.

Index Terms- Lip pattern, dominant, picture.

I. INTRODUCTION

The number of mass disasters in Indonesia has increased in recent years, both caused by nature and human negligence. Natural disasters such as the tsunami in Aceh and in West Java, the earthquake in Padang, and the eruption of Mount Merapi, in Central Java have claimed many lives. In addition, several sinking ship accidents, plane crashes, and terrorism cases such as the Bali bombing case, the JW Marriott hotel bomb case, and several other criminal cases contributed to the increasing number of disasters in Indonesia.

The National Disaster Management Agency (BNPB) noted that in the period of 2020 there have been 2,925 natural disaster events as of Wednesday, (1/1) until today, Tuesday (28/12). According to data compiled by BNPB, the disaster that occurred throughout 2020 was dominated by hydrometeorological natural disasters such as floods, flash floods, landslides, tornadoes, droughts to forest and land fires (karhutla).

Based on the details of hydrometeorological disaster data, flood events have occurred up to 1,065 events throughout 2020. Then disasters caused by tornadoes have occurred as many as 873 and landslides 572 incidents.

Furthermore, for karhutla has occurred as many as 326, tidal waves and abrasions of 36 events and droughts occurred as many as 29 events in the country.

As for the type of geological and volcanology disaster, Doni said that the earthquake disaster event has occurred as many as 16 times and 7 events for volcanic eruption events. "Earthquake 16 events, eruption of volcano 7 events," said Doni. Furthermore, of the total incidents throughout 2020, Doni said that the death toll from the impact of the natural disaster was 370 people, 39 people were missing and 536 people were injured. The number of fatalities in disasters and cases of such cases causes the role of identification to be important. Identification is an effort made with the aim of determining a person's identity. The importance of the role of identification has been regulated in the regulation of Law No. 36 of 2009 article 118 of the first paragraph, that every doctor must be willing to help the process of identification of victims if requested by investigators. Determination of personal identity can be done using two methods of identification, namely primary identification such as fingerprint examination, DNA, teeth and secondary identification methods such as, visual examination, photography, property, medical, including fingerprint examination. In the world of forensic dentistry, the role of dentists in addition to being the main role in dental examinations can also play a role in supporting examinations such as fingerprint examination.

Lip fingerprints are a pattern in the form of a slit or fissure found on the surface of the lip mucosa. The science that studies the pattern of fingerprints is called Cheiloscropy.

Of all these cases, 34 cases were solved, so it can be concluded that fingerprints can be used as an individual identification tool in criminal cases. In criminal cases, lip prints can be either visible lip fingerprints or latent lip fingerprints. Fingerprints should be displayable and can be stored for a long time, so they can be analyzed at a later date. Prabhu said that fingerprint images can be displayed and analyzed using several methods such as lipstick methods, photography, and dentistry print materials.

II. RESEARCH METHODS

In this study is using descriptive-analytical methods that describe the pattern and flow of lip fingerprints in SDN students 043945 Pernantin in Pernantin Village, Juhar District, Karo District of North Sumatra Province, and analyze the pattern and flow of dominant lip fingerprints by age (from the age of 7 - 12 years).

How this research works is as follows:

- 1) Each student is visited at home.
- 2) Fill in the respondent data.
- 3) The respondent sits and heads straight ahead then I will apply lipstick to all parts of the subject's lips evenly performed by a female assistant.
- 4) Then the respondent attached lips to the hvs paper that I had prepared by way of me folding two first the paper.
- 5) Then I will read the fingerprint pattern by looking for the most dominant pattern on each image of the fingerprint pattern by way after the dry lipstick I look with a magnifying glass and divide the

Branched's fingerprints. In students aged 11 years of 4 subjects of this study found 3 people (75%) had a Complete Straight fingerprint pattern, and 1 person (25%) had a Partial Straight fingerprint pattern. And the last in 12-year-old students of 8 subjects of this study found 3 people (37.5%) had a Complete Straight fingerprint pattern, 4 people (50%) had a Partial Straight fingerprint pattern, and 1 person (12.5%) had a Branched fingerprint pattern.

Of the total study subjects who numbered 40 people, the Complete Straight type of fingerprint pattern had the largest number or the most dominant of the 40 study subjects, namely 17 people (42.5%) of the study subjects, then partial straight type fingerprint patterns amounted to 12 people (30%) of the study subjects, branched type fingerprint patterns amounted to 8 people (20%) of the study subjects, Intersected type lip fingerprint patterns amounted to 2 people (5%) of the study subjects, and the last undifferentiated type of fingerprint pattern amounted to 1 person (2.5%) of the study subjects.

III. RESULTS AND DISCUSSIONS

The number of subjects in this study was 40 people where the number of subjects consisted of 8 students aged 7 years, 5 students aged 8 years, 9 students aged 9 years, 6 students aged 10, 4 students aged 11 years, and 8 students aged 12 years from this research data it is known that students aged 9 years are the most numerous and who are 11 years old. At least the number.

In students aged 7 years we can see from 8 subjects of this study found 3 people (37.5%) have a Complete Straight fingerprint pattern, 3 people (37.5%) have a Partial Straight fingerprint pattern, and 2 people (25%) have a Branched fingerprint pattern. In students who are 8 years old we can see from 5 subjects of this study found 2 people (40%) have a Complete Straight fingerprint pattern, 2 people (40%) have a Partial Straight fingerprint pattern, and 1 person (20%) has a Intersected lip fingerprint pattern. Then in students aged 9 years from 9 subjects of this study found 5 people (55.55%) had a Complete Straight fingerprint pattern, 1 person (11.11%) had a Partial Straight fingerprint pattern, 1 person (11.11%) had a Intersected lip fingerprint pattern, and 2 people (22.22%) had a Branched fingerprint pattern. In students aged 10 years of 6 subjects of this study found 1 person (16.66%) had a Complete Straight fingerprint pattern, 1 person (16.66%) had a Partial Straight fingerprint pattern, 1 person (16.66%) had an Undifferentiated lip fingerprint pattern, and 3 people (50%) had a partial straight fingerprint pattern.

IV. CONCLUSION

Based on the results of the above research and the discussion above, it can be concluded as follows:

1. Of the overall study subjects of 40 people, complete straight fingerprint pattern has the largest number or the most dominant, which is 17 people (42.5%).
2. Partial Straight type lip print pattern numbers 12 people (30%).
3. Branched type fingerprint pattern numbers 8 people (20%).
4. Intersected type lip fingerprint pattern numbers 2 people (5%).
5. Undifferentiated type lip fingerprint pattern numbered 1 person (2.5%) so that out of 40 subjects of the study this undifferentiated type fingerprint pattern was the least.

Research on fingerprints until now has not been done much so research in this field should be able to be done more often for wider development.

There is no single pattern of fingerprints that have similarities, so grouping can be done more easily and can be used as an identification tool can be applied easily and widely, as a

method of confirmation of a simple screening examination that is done in the field.

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