



UNIVERSITI TEKNOLOGI MARA

**THE ANALYSIS OF ALPHA THALASSAEMIA MAJOR AND
ALPHA THALASSAEMIA MINOR BASED ON DATA DNA
ANALYSIS AT HOSPITAL RAJA PEREMPUAN ZAINAB II,
KELANTAN**

NURUL SYAZWANIE BINTI ZULRAIMI

**Dissertation submitted in partial fulfillment of the requirements for Diploma in
Medical Laboratory Technology**

Faculty of Health Sciences

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DECLARATION

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations of Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student : NURUL SYAZWANIE BINTI ZULRAIMI

Student I.D. No. : 2012

Programme : MEDICAL LABORATORY TECHNOLOGY

Faculty : HEALTH SCIENCE

Dissertation Title : THE ANALYSIS OF ALPHA THALASSAEMIA MAJOR AND ALPHA
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Signature of Student :

Date : 21 AUGUST 2014

ABSTRACT

THE ANALYSIS OF ALPHA THALASSAEMIA MAJOR AND ALPHA THALASSAEMIA MINOR BASED ON DATA DNA ANALYSIS AT HOSPITAL RAJA PEREMPUAN ZAINAB II, KELANTAN

The aim of the present study was to compare the numbers of patient alpha thalassaemia major with the numbers of patient thalassaemia minor. Thalassaemia is an inherited blood disorder due to imbalance the formation polypeptide chain. It was alpha thalassaemia major and alpha thalassaemia minor. Among eighty (80) samples of positive thalassaemia results was taken for this study. The results were collected from data of DNA analysis that taken on July and August as the highest case of the month in 2013. The data obtained composed with results full blood count, full blood picture, Hb analysis and DNA analysis. From the results obtained, it can be concluded that alpha thalassaemia minor is more cases than alpha thalassaemia major. The deletion of one or two alpha genes is alpha thalassaemia minor. But alpha thalassaemia major such as Hb H disease and Hb Bart's. In the same time, it was develop new knowledge about alpha thalassaemia that DNA analysis is the best selection for investigate this case due the test used is Polymerase chain reaction (PCR).

Key words : alpha thalassaemia, major and minor alpha thalassaemia, DNA analysis

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