

UNIVERSITI TEKNOLOGI MARA

**THE PREVALENCE OF THALASSEMIA IN PERLIS
2019**

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DECLARATION

I hereby declare that this thesis is based on my original work. I also declare that this thesis has not previously or concurrently submitted by any other student at UiTM or other institutions.

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ABSTRACT

Introduction: There are 126 cases of thalassemia in Perlis in 2019. Compared to other states with larger populations, the number is lower. Thalassemia is an inherited blood disorder that is passed down from parents to children through genes. One of the causes of thalassemia is the marriage between a carrier with a carrier and a thalassemia patient with a carrier. The common type of thalassemia in Perlis in 2019 is HbE/ beta-thalassemia. Thalassemia patients may or may not show symptoms depending on the type of thalassemia. There are several types of treatment that will be given to the patients to help them continue living better.

Objective: To study the prevalence of thalassemia in Malaysia and the distribution of thalassemia cases in Perlis in 2019.

Materials and methods: In our study, we used a secondary source to collect the materials which is data from Malaysian Thalassemia Registry 2019. The data contains 126 cases of thalassemia that occurred in Perlis in 2019 where we evaluated using certain study methods.

Result and discussion: This study has review about distribution of Thalassemia in Perlis by gender, races, age group and type of diagnosis. Patients with severe Thalassemia will receive regular blood transfusion as treatment. This research also reviews about the criteria of the blood that used for transfusion for thalassemia patients. The criteria were chosen based on blood group, red cell phenotyping and compatibility by cross-matching test as confirmation.

Conclusion: Perlis affected consistently by thalassemia cases in 2019 despite being the smallest state in Malaysia.

THE PREVALENCE OF THALASSEMIA IN PERLIS 2019

Key words: Thalassemia in Perlis, HbE/ beta-thalassemia, blood transfusion, iron chelation, compatibility test, genetic disorder, anemia, hemoglobin level

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