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# Book Review ' Thalassaemia Module'

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**Book Review**

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## Abstract

Thalassemia is a hereditary blood disorder (genetic disease) that interferes with the formation of normal red blood cells. Thalassemia patients produce red blood cells that is easily broken or destroyed in the blood. Deficiencies normal red blood cells will cause the patient often appear pale due to low hemoglobin levels (anaemia). Red blood cells supply oxygen to tissues in the humans' body. This lack of red blood cells results in the Thalassemia patient feels lethargic, lifeless and may be short of breath if the hemoglobin level is decreasing. This book explains about Thalassemia disease, list important facts about Thalassemia disease, stating the physical characteristics of Thalassemia patients, list the signs and symptoms of Thalassemia disease, states treatment for Thalassemia patients in general, explain preventive measures and describe Thalassemia disease among teenagers.

**Keywords:** Health; Education; Thalassemia; Disease; Medicine

## Introduction

The objective of this book is to explain Thalassemia disease, list important facts about Thalassemia disease, state the physical characteristics of Thalassemia patients and list the signs and symptoms of Thalassemia disease, states treatment for Thalassemia patients in general, explain preventive measures and explain Thalassemia disease among teenagers. Thalassemia is a hereditary blood disorder (genetic disease) that interferes with the formation of normal red blood cells. Thalassemia patients produce blood cells red that is easily broken or destroyed in the blood. Deficiencies normal red blood cells will cause the patient often appear pale due to low hemoglobin levels (anaemia). Red blood cells supply oxygen to tissues in the humans body. This lack of red blood cells results in the Thalassemia patient feels lethargic, lifeless and may be short of breath if the hemoglobin level is decreasing. There are two types of Thalassemia which are Thalassemia carrier (minor) and Thalassemia (major) patients.

For Thalassemia carriers, they have either a mother or a father or both carry the Thalassemia gene, have no signs of the disease and live normal life and can only be detected through a blood test. As for Thalassemia Patients, they have a mother and father who are confirmed as Thalassemia carriers or one of the parents is confirmed as Thalassemia patients who have a patient partner or Thalassemia carriers and have signs of illness and require blood evacuation and lifelong treatment. Most Thalassemia carriers do not realize that they are carriers because they are healthy. They just would know if they had a blood test or if there is a family history of Thalassemia major disease. Children born with Thalassemia major appear normal at birth. However, they will begin to experience the problem of lack of blood (anaemia) when reaching the age of between 6 months and 18 months. From an epidemiological point of view, Thalassemia was originally thought to be a disease that only occurred in the

Mediterranean region. However it has now grown widely in most countries in whole world. Thalassemia has been identified in southern Europe such as Portugal, Spain, Italy and Greece as well as in some parts of the country formerly known as the Soviet Union. Thalassemia is also detected in Middle Eastern countries, Iran, Pakistan, India, Bangladesh, Thailand, Malaysia, Indonesia and South China as well as countries along the coast of North Africa and South America.

Population migration and intermarriage between different ethnic groups are among the contributing factors of Thalassemia develops widely. Thalassemia is not something new in Malaysia. Several studies that have been conducted in this country show that the carrier rate of Thalassemia is in the range of 3 to 5 percent of the Malaysian population. With that, it is estimated that 600,000 to 1 million Malaysians are carriers of this disease. Taking into account 3 to 5 percent of carriers in the country this, it is estimated that there are 120 to 350 Thalassemia babies is born every year. One in 20 Malaysians is a carrier of the Thalassemia gene. Number of Thalassemia patients born can only be contained if each carrier Thalassemia does not marry with another Thalassemia carrier. There are 3 levels of physical characteristics of Thalassemia. At birth, the baby looks healthy. At the age of 6 to 18 months, the baby started showing signs of anemia and more serious. When the child is growing up, paleness becomes more pronounced, the child is always weak and restless and serious anemia can cause breathe difficulties. Without perfect treatment, patients experience signs and symptoms of stunted growth, paleness (anemia, enlarged abdomen due to swelling of the liver and spleen, changes in the formation of abnormal facial bones, cheeks and jaws (late signs) and Jaundice.

There are 3 types of treatment for Thalassemia major patients. First is the blood transfusion where patients need to undergo continuous blood transfusions monthly for life and continuous blood transfusions without substance removal treatment iron that can cause excess iron in the body. Complications from excess iron are heart failure, damage to organ function and endocrine disruption. Excess iron can be reduced through iron removal treatment. There are 3 types of treatment in iron removal which are desferal treatment 5 times a week, deferiprone treatment and deferasirox treatment. Bone marrow transplant treatment can be carried out if there is a suitable donor from families. As a preventive measure, all members of the patient's family should undergo a Thalassemia screening test to identify their status. Family member other close ones are also encouraged to undergo a Thalassemia screening test especially those aged 1 year and above and within the reproductive age range. For Thalassemia carriers who want to marry, make sure your partner is not a Thalassemia carrier underwent a Thalassemia screening test. If the mother of a Thalassemia patient wants to get pregnant, they need to be informed about the risks of future pregnancies and the option to perform perinatal diagnosis.

## Reference

1. (2017) Pusat Promosi Pendidikan Pesakit Hospital, Kementerian Kesihatan Malaysia. Modul Thalassaemia. Malaysia.