

UNIVERSITI TEKNOLOGI MARA



**THE PREVALENCE OF JAUNDICE AMONG NEONATES IN HOSPITAL TAIPING
FROM JANUARY TO MARCH 2015**

NURUL AMIRAH BT AMRAN

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

Faculty of Health Sciences

October 2015

ACKNOWLEDGEMENT

Appreciation goes to the following names for their continues support and invaluable contribution towards the completion of the dissertation entitled The Prevalence of Jaundice In Neonates In Hospital Taiping From January to March 2015 :

1. Norhabibah Bt Abdul Malik
2. Amran Bin Rais
3. Nor Raihan Bt Mohd Shabani
4. Syarifah Masyitah Bt Habib Dzulkairnain
5. Lim Seng Hock
6. Nor Hafeeda Bt Rosdan
7. Zakaria Bin Ismail
8. Muhammad Nabil Fikri Bin Roslan
9. Nurdiana Bt Zainuddin
10. Wan Ismahanisa Bt Ismail
11. Meor Aidil Naim

TABLE OF CONTENTS

Chapter	Content	Page
	TITLE PAGE	
	DECLARATION	i
	APPROVAL	ii
	ACKNOWLEDGEMENT	iii
	TABLE OF CONTENTS	iv
	ABSTRACT	v
1.0	INTRODUCTION	1
	1.1 Background of Study	1
	1.2 Problem Statement	2
	1.3 Research Justification	2
	1.4 Objective	3
	1.4.1 General Objectives	3
	1.4.2 Specific Objectives	3
2.0	LITERITURE REVIEW	
	2.1 Jaundice	4

ABSTRACT

Jaundice is a condition where the neonates' sclera (white of the eye) and the skin become yellow. It is caused by the build up, accumulation and rises of bilirubin in bloodstream. The case of jaundice in neonates is increasing. The prevalence is review to increase the awareness of citizens about jaundice. Simple method is used on this case. By measuring the level of bilirubin in neonates' blood, we can identify whether the baby is suffer from jaundice. High level of bilirubin which is beyond normal range (3.0 – 17.0 mg/dl), the baby is considered to suffer jaundice. A prevention of jaundice has been introduced to decreased the number of baby that suffered from jaundice.

1. INTRODUCTION

1.1 Background of Study

Jaundice (icterus) in neonates is the most common diagnoses among infants. It is a condition where the neonates' sclera (white of the eye) and the skin become yellow (Richard and Pamela, 1994). It is caused by the build up, accumulation and rises of bilirubin (degradation product of hemoglobin of RBC) in bloodstream (> 5 mg/dl) which is called hyperbilirubinemia (Ministry of Health Malaysia, 2003). When exceeds 25 mg/dl, neonates are at risk for neurological damage. High bilirubin in serum will cause the unconjugated bilirubin of newborn to reabsorbed into the nerve cells and kill these cells (Ministry of Health, 2002).

Causes of jaundice is due to hemolysis such as ABO incompatibility and rhesus disease. Others can be due to sepsis, defective of red cell enzyme (G6PD) and red cell membrane defects (hereditary spherocyte) (Queensland Maternity and Neonatal clinical guidelines program, 2009).

There are three type of jaundice which is physiological jaundice, breast milk jaundice and non – physiological jaundice, (Ministry of Health, 2002). Physiological jaundice is when neonates' serum bilirubin increase up to 12mg/dL by the 3rd day of life. As for breast milk jaundice, substances like enzyme (glucoronidase), 3 alpha, and 20 beta pregnanediol in breastmilk is thought to be may be the responsible for breastmilk jaundice (Kuhr, 1982 ; Adam, 1985; Maisels, 1986; Saigal 1982; De Carvelho, 1981) . It require phototherapy for the breast feed infants. Lastly is the non – physiological jaundice (pathological) which is due to hemolysis or sepsis (Ministry of Health, 2002)