

Universiti Teknologi MARA

**Traumatic Brain Injury Model Using Case-Based
Reasoning**

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"None of you will have faith till he wishes for his brother what he likes for himself."

Reporter: Hadhrat Anas (r)

Sahih Bukhari

ABSTRACT

Traumatic Brain Injury (TBI) is unrecognized major public health problem which is referred as the “silent epidemic” because the effects of TBI, such as difficulty in concentration, deficit memory, changes of behavioral and emotional that may not readily apparent. Furthermore, awareness about TBI among the general public is limited. Currently, there are bundle of cases exist but there are no such a good way to find the cases of TBI in shortest time. Thus, this project aim to identify the cases that is caused by TBI and designing a CBR model using Case-Based Reasoning technique. CBR originates from the theories of human cognition and provides a scientific cognitive model. The finding of this research is a CBR model that relies on psychological model based on TBI problem. In addition, the model is designed with the perspective of Quran in Islam to treat TBI’s patient. For the future works, the model can be integrated to accommodate in others domain.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter explains briefly about the overview of research background of a Traumatic Brain Injury that relies on the technique of case-based reasoning. There are background of the study, problem statement, research objectives, research question, research scopes, overview of the methodology, research significances and the outline of the thesis.

1.2 Background of Research

In this research, the focus is on CBR technique whereby the use of CBR is studied in the medical domain. The model of CBR will be relying on TBI problem that consists of mild, moderate and severe injury. Traumatic brain injury (TBI) or also known as head injury can be defined as any alteration in mental or physical functioning related to the injury that caused by the head being hit by something or shaken violently. TBI is graded as mild, moderate, or severe which is relying exclusively upon the severity of the Glasgow coma scale (GCS) that acts as a criterion to identify patient itself by a doctor.