# Introduction

Traumatic Brain Injury (TBI) is a significant public health problem worldwide and is predicted to surpass many diseases as a major cause of death and disability by the year 2020. The majority of TBI cases 60 % are a result of road traffic injuries, followed by falls 20-30 % and violence 10% *(**World Health Organization, 2003**).*

Head injury usually refers to traumatic brain injury (TBI), but is a broader category because it can involve damage to structures other than the brain, such as the scalp and skull. Traumatic brain injury is damage to the brain resulting from external mechanical force, such as rapid acceleration or deceleration, impact, blast waves, or penetration by a projectile **(*Parikh et al., 2007*).**

TBI is usually classified based on the severity, anatomical features of the injury, and the mechanism (the causative forces). Mechanism-related classification divides TBI into closed and penetrating head injuries. Closed (also called non-penetrating, or blunt injury) occurs when the brain is not exposed ***(Blissitt, 2006),*** while penetrating or open head injury occurs when an object pierces the skull and breaches the dura mater (the outermost membrane surrounding the brain) ***(Hannay et al., 2004 and Saatman et al., 2008).***

TBI can cause a host of physical, cognitive, emotional, and behavioral effects, and outcome can range from complete recovery to permanent

disability or death. Most TBIs are mild and do not cause permanent or long-term disability, however all severity levels of TBI have the potential to cause significant, long-lasting disabilit**y** ***(Brown et al., 2008).*** Permanent disability is thought to occur in 10 % of mild injuries, 66 %of moderate injuries, and 100 % of severe injuries ***(Frey, 2003).***