

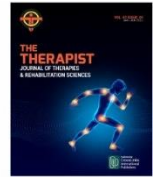


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Assessment of Health-Related Quality of Life in Post Traumatic Brain Injury

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ABSTRACT

Traumatic brain injury (TBI) occurs as a result of an outside force, e.g. a blow to the head in a fall or traffic accident, and is a major cause of death and disability all over the world, especially in children and young adults Objective: To determine the Assessment of health-related quality of life in post-traumatic brain injury Methods: It was the cross-sectional observational study. Data was collected by 40 TBI patients on basis of inclusion and exclusion criteria. Quality of life after traumatic brain injury questionnaire was used in this study to see the QoL in post TBI patients Results: In general males were more affected then females and main reason of TBI was motor bike. The quality of life much affected in feeling, physical work and social relationship. The QoL didn't depend upon time since injury but depend on severity of injury Conclusion: Physical work issue was the fundamental predictive factor of hundred personal satisfaction of TBI individuals perhaps, there was no relationship among impairment and QoL. This change of QOL has clinical implications and features the need of more endeavors to improve the rehabilitation interventions.

INTRODUCTION

Traumatic brain injury (TBI) happens as a result of an exterior drive, e.g., a blow to the head in a drop or activity mischance, and may be a major cause of passing and inability all over the world, particularly in children and youthful grown-ups [1]. The term 'outcome' reflects an engaging influence after a fundamental ailment or hurt. Routinely the terms 'functioning' and 'disability' are utilized to delineate comes around, outlining the level of capacities and limitations to perform commonplace works out of each day living [2]. TBI is a noteworthy reason for death. It is also a main reason of handicap and paralysis among individuals older than 40 years. In 1996 5.3 million handicap cases were reported in USA due to TBI [3].

Quality of life (QoL) could be a disputable and complicated issue. There is no agreement on its diagnosis and measurement. However, it is as a rule considered as a multidimensional conception that consists of many identifiable spaces, such as social, psychological and physical performance. Fuhrer as of late stated that, in any case of demonstrate of disablement utilized, assessments of the results of therapeutic restoration are deficient on the off chance that they disregard the personal well-being. Dijkers acknowledged objective measures of QoL. These were based on remote characterized records of life circumstances of individuals. Subjective measures emphasize on self-perception of individual current status. The subjective approach also influences on self-willed, well-being and fulfillment measures. Feeling perspectives of QoL link builds pleasure resolve, positive and negative events. The main focus here is on superior or annoying thoughts. Life fulfillment implies to a psychologically arranged, unverifiable judgment of some one's actual life circumstance, associated with one's claim wants. Be that because it may, persons with TBI are usually young and restorative. They have life trust and preserve from cognitive and physical disabilities which is able compromise their social, family and professional working [4]. QoL may be an extent of a person's capacity to work in mental, physical and social prosperity spaces at a measurement relentless



with experiences, feelings and wants. Prosperity related quality of life (HRQoL) insinuates to the prompt impact of a restorative condition or treatment on a person's see of their physical, eager or social thriving. HRQoL could be evaluated through target evaluation of capacity and the unique see of the quiet. Past investigate has illustrated that individual with TBI regularly report more horrendous HRQoL post-damage than the in general open and patients who have bolstered distinctive sorts of harm [5].

TBI may be a vital reason for passing and of incapacitate particularly in individuals beneath 40 a long time ancient. TBI is a noteworthy reason for death. It is also a main reason of handicap and paralysis among individuals older than 40 years. In 1996 5.3 million handicap cases were reported in USA due to TBI [6]. Components related with HRQoL, for case, the impact of mental status and mindfulness, are expressly declared. One-hundred seventy-two individuals after TBI were enrolled from the records of strongly centers, the larger part of them having a Glasgow Coma Scale (GCS) 24-hour most exceedingly terrible score and a Glasgow Result Scale (GOSE) score. Individuals had genuine (24%), direct (11%) and smooth (56%) wounds as studied on the GCS, 3 months to 15 a long-time post-injury [7].

The rate of TBI is tall and growing for ancient individuals in Western social orders, generally it on a very basic level impacts young people and young grown-ups in auto collisions, and comes when they are settling on choices almost imperative life issues with regard to opportunity, work and associations. The long pull mental, physical and excited shortcomings due to TBI. The succeeding controls of each day life works out impact the individual's mental self-representation, adjusting strategies, and at final their prosperity related individual fulfillment (HRQoL) fair as that of their basic others. More prominent initial reality - as evaluated by post-traumatic amnesia (PTA), Glasgow Coma Scale score (GOS) and Glasgow Coma Scale (GCS), on discharge seem to expect more disastrous results with respect to come back to social associations [6].

Common signs and side impacts developing from TBI consolidate physical preventions, for case, cerebral torments, reduced coordination, visual changes, and issues with equalization. Moreover, mental changes, for illustration, prevented memory, thought, considering, and official capacity are commonly point by point. These mental changes can result in correspondence issues, for illustration, inconvenience keeping up or choosing conversational subjects, rotating in discourse, and disentangling energetic or allegorical dialect. At final, individuals with TBI may appear inconvenience with excited heading (i.e., the way toward beginning, understanding, and managing energetic states) bringing around issues, for case, pressure, fomentation, and pity [8].

TBI component of harm is emphatically related with the individual's socioeconomics in created nations. One third of TBIs come about from mental disturbances, 10% from amateur wounds. Horseback riding was main recreational movement [4]. Nearly indistinguishable causal extents of TBI were detailed in San Diego Province: falls 20%, transport related 50%, and sports 10%. In Australia, sports, falls and street activity mischances were major reasons of TBIs [9].

TBI damage is a basic common restorative issue in various countries since of its high rates of event, mortality and bleakness. The bleakness of TBI comprises of a heterogeneous scope of morbidities which much of the time result in long pull failure and family inconvenience. Recently, looks at have concentrated thought on mental disarranges rising after TBI, revealing their genuine work within the horribleness of the disease. Discouragement and personality changes have been delineated as the foremost broadly recognized mental clutters taking after TBI. Examinations of back-to-back illustrations have found commonness rates of despairing expanding from 9– 36%, and personality changes impacting more than 33% of extraordinary TBI survivors [10].

Brain is the central part of nervous system. Along with spinal cord it helps to maintain coordination and action. Major components of brain are cerebellum., cerebrum and brainstem. It controls all activity in body such as movement, action, sense, feel, coordination and integration. Nervous system mainly involved in decision making and action. Brainstem act as a linkage between cerebrum and spinal cord. There are three parts of brain stem medulla oblongata, pons and midbrain. All brain parts and spinal cord are protected by three layers, meninges. Space in brain are filled with cerebrospinal fluid also protects and helps to transfer messages. Human brain is consisted of glial cells, neurons, blood vessels and neural stem cells. Carotid arteries supply blood to neck and head whereas vertebral arteries to the back. These carotid arteries are further

divided into common carotid arteries and supply blood to brain by entering in cranium through carotid canal. On the other hand, vertebral arteries divided into sub-clavicle arteries and supply blood to left and right side of back. This blood supply provides oxygen and nutrition to all parts of the brain and carry deoxygenated blood from blood towards heart. The Rationale of study is to assess quality of life after TBI. Also access duration of recovery in which they return to their normal life.

METHODS

An observational cross-sectional method was used. In the current study 40 patients was taken from different hospitals of Lahore. Non-probability purposive sampling technique was used to collect the data. After taking informed consent recording sociodemographic details was noted. Assessment of health-related quality of life in post-traumatic brain injury was noted through questionnaire. The study obtained ethical clearance from University Institutional Review board. The study included both males and females, age ranked 20-55, cause of TBI was road accident, below to the head and fall. All data was analyzed by statistical program SPSS (version 21. The aim of data collection is to determine the assessment of the health-related quality of life in post-TBI. All the data was recorded through Quality of life after brain injury (QOLIBRI).

RESULTS

Out of 40 patients 12(30.0) have motorcycle accident, 10(25.0) have car accident, 9(22.5) patients have TBI due to fall, 6(15.0) have industrial accident and 3(7.5) patients were blow to head (Figure 1). Out of 40 patients 9 (22.5) females have TBI and 31 (77.5) males have TBI. Out of 40 patients front of 12 patients were affected, back of 10 patients were affected Right side of 9 patients were affected, left side of 6 patients were affected and top of head of 3 patients were affected (Table 1). Out of 40 patients 26 patients have loss of consciousness (Figure 2).

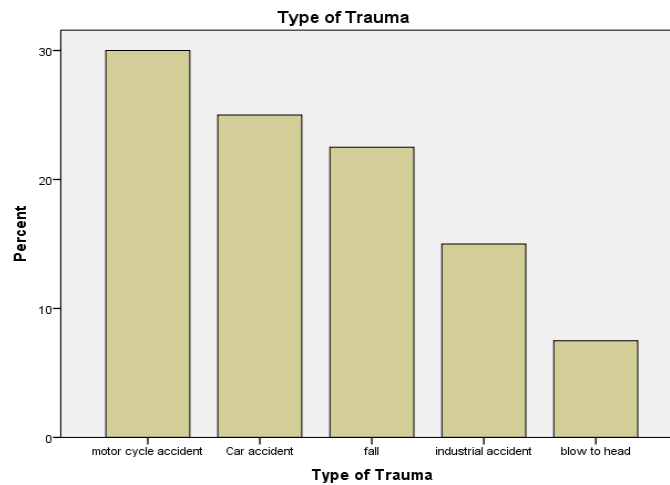


Figure 1: Descriptive statistics for types of trauma

Part of head affected

Part of head affected	Frequency	Percent %
Front	12	30.0
Back	10	25.0
Right side	9	22.5
Left side	6	15.0
Top of head	3	7.5

Table 1: Descriptive statistics for which part of head affected

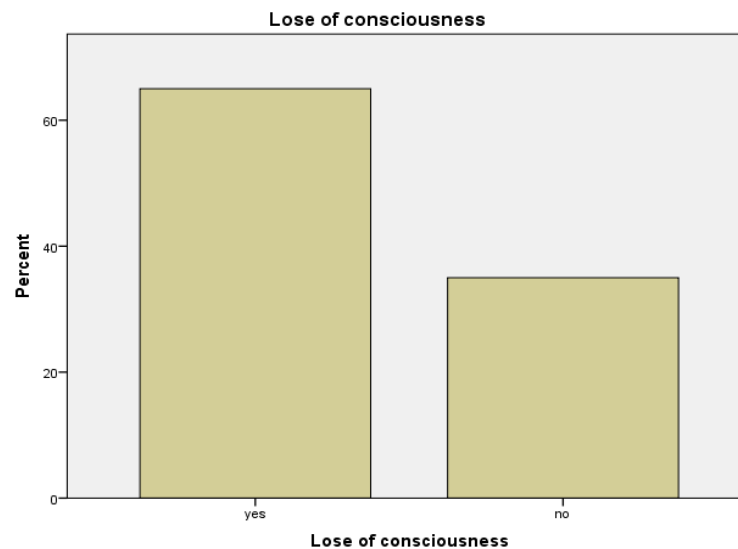


Figure 2: Descriptive statistics for loss of consciousness

DISCUSSION

The present study was conducted on topic quality of life after TBI. It has devastating effects on one's life. After injury quality of life depends upon how sever the injury was and which part of the brain is affected and most commonly the reason of injury. Males using motor bikes were more prone towards TBI. The quality of life was assessed by using QOLIBRI questionnaire. Different studies supported the results of current study at different level of QOLIBRI such as thinking abilities, emotional energy, independence in daily life, social relationship, feelings, and physical problems. Such as work done by Sinni and his colleagues showed that quality of life was not associated with time of injury but a relationship was found with severity of injury. quality of life depends upon depression, age at the time of injury and anxiety. There results were similar to current study [14].

In previous researches the strong association was found between QoL after TBI and emotional state. The association between amount of help needed and QOLIBRI was also found in previous work whereas the age at the time of injury was the main predicator of quality of life after TBI. As in the present study the age at the time of injury showed main correlation [15]. In the present study there was positive relation was found between QoL and severity of injury but in the work performed by Fielder and his co-workers showed that there was negative relation between severity of injury and QOLIBRI. These results were unbelievable but certain studies showed that there was relationship between them and some showed that there was no relationship between them [16].

Another study performed by Sameh and colleagues showed that the main area effects the QoL was social relationship and feelings but in current study the main area involved was feelings and physical problems [17]. A study conducted by Siponski showed that the QoL was related to depression, anxiety, amount of help needed and age at injury. the QoL didn't relate to time since injury. So as in the present study [18]. In a work done by Kolakowsky indicated life quality post injury. With respect to Health Information, Involvement with Care and family needs were most often rated as met. Instrumental Support (31.52%) and Professional Support (28.38%) needs were most often rated as not met. The results showed similarity to current results [19]. A work done by John on effect of job after TBI showed that employment had strong relationship with TBI and in my study after TBI the employment and injury also showed a significant relationship [20].

CONCLUSION

This study conducted that out of 40 patients, TBI is prominent in males as compared to females due to road traffic accident. Memory issue was the fundamental predictive factor of hundred personal satisfaction of TBI individuals; perhaps, there was no relationship among impairment and QoL. This change of QOL has clinical implications and features the need of more

endeavors to improve the rehabilitation interventions. Personal satisfaction remained generally stable. Mild injuries were related with lower life fulfillment, and watchful follow-up is prescribed to target patients in specific need.

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