

# Assessment of disability with WHODAS II – 12 Item in trauma patients

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**Background:** More than a billion people worldwide live with disabilities and the majority of disabilities are caused by injuries.

**Objectives:** This study describes disability and return to work or daily activities status over 3 months following injury.

**Patients and Methods:** In this prospective follow up study, 140 injured patients aged 15–65 year in Kashan were assessed for disability status with the brief WHODAS II 12-item instrument at 1- and 3-months post-injury. Participants were divided into 5 groups as follows: ‘no disability’ to ‘very severe disability’ based on the score. Work status was ascertained at the 3-month assessment with the single question “Are you back at work or back to your daily activities following your injury?” Also demographic characteristics such as age, gender, place of residency, nationality, level of education, and information about type of injury, place of injury, injured organ, injury severity score (ISS), revised trauma score (RTS), and duration of hospital stay were gathered by a checklist. Data analysis was conducted using SPSS and the significance level was set at  $p < 0.05$ .

**Results:** The average age of patients was  $34.1 \pm 14.6$  year. In total 86.4% of the participants were male, 78.6% lived in urban areas, 87.1% were Iranian, and 58.6% were employed. A total of 62.1% of trauma patient injuries were traffic related injuries and most of them (75%) were motor cycle accidents. A total of 79.3% of patients had injuries in the extremities with other injuries as follows: head and neck (41.4%), thorax (7.1%), and abdomen (3.6%). The mean disability score at 1- and 3-months post injury was  $25.9 \pm 10.2$  and  $16.47 \pm 7.8$ , respectively. There was statistically significant differences between disability statuses at 1- and 3-months after trauma ( $P < 0.0001$ ). After 3-months, 79.3% of patients had returned to work or daily activities (mean and SD time of return was  $27.7 \pm 23.9$  days). The disability measures showed a statistically significant relationship with ISS ( $P < 0.0001$ ) and return to work ( $P < 0.0001$ ) in trauma patients.

**Conclusion:** Considering more than one third of patients were disabled after 3 months following trauma, this information may help in organize long-term follow up and rehabilitation programs in trauma patients.

**Keyword:** Disability, WHODAS faselleh bedeed II, injury, return to work