Understanding Traumatic Brain Injury in the Primary Care Setting
Laura Gano, MPH
Jacob Kean, PhD
Scott E. Renshaw, MD
Ruben Hernandez, MD
DeAnna Willis, MD

Department of Family Medicine (Ms. Gano, Drs. Renshaw, Hernandez, Willis)
Indiana University-Purdue University Indianapolis

Department of Population Health Sciences (Dr. Kean)
University of Utah

Background: TBI is being re-conceptualized as a chronic disease causative agent rather than as a single, acute event. This study examined how familiar family medicine physicians (PCPs) are with TBI and their level of confidence in treating TBI sequelae likely to be seen in primary care. We also examined PCP attitudes regarding care for post-acute mild TBI and moderate/severe TBI in primary care and how recently the respondent had cared for a mild TBI and/or moderate/severe TBI patient.

Methods: The study featured a mixed methods study design. A survey was administered on paper and electronically. A semi-structured qualitative interview guide was developed based upon survey responses. Descriptive statistics were calculated.

Results: Most respondents associated neurological symptoms/conditions as TBI sequelae: irritability, 100.0%, fatigue, 98.0%; insomnia, 88.2%, depression, 98.0%, headaches, 98.0%, anxiety, 80.4%. Two-thirds (66.7%) identified epilepsy as a condition associated with TBI. Just over one-half associated tinnitus (51.0%) or loss of libido (52.9%) with TBI while only one-third (33.3%) associated incontinence with TBI.

Most physicians felt confident treating depression (84.0%), anxiety (82.4%), headache (80.4%) and insomnia (76.0%). Physicians felt less confident in treating fatigue (68.0%), irritability (68.0%), incontinence (51.2%) and loss of libido (50.0%). The least amount of confidence was claimed in treating epilepsy (37.5%) and tinnitus (36.4%).

All respondents (100.0%) believed that a PCP can manage post-acute mild TBI (concussion) care while 52.0% agreed that a PCP can manage post-acute care for moderate/severe TBI.

Only one respondent (2.0%) had never cared for a mild TBI patient. Most (70.6%) had cared for a moderate/severe TBI patient within the past two years while 5.9% had cared for one of these patients more than a year ago. Nearly twenty percent (19.7%) had never cared for a moderate/severe TBI patient and 3.9% were unsure if they had.