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The Implications of Mild Traumatic Brain Injury and Malingering, Knowledge Base, and Opinions in Life Care Planning

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Abstract

The current study surveyed 86 rehabilitation educators from 27 universities spanning 17 states teaching graduate rehabilitation counseling students regarding to what extent, if any, they address the medical and psychosocial aspects of traumatic brain injury in their curriculum to students. Students of various disciplines who develop life care plans particularly with mild traumatic brain injury must be aware of the symptomatology and prognosis in relation to long-term medical and psychological care needs. Knowing how to distinguish and assess valid subjective complaints, neuropsychological testing, and diagnostic findings regarding traumatic brain injury is key to developing a methodologically reliable and valid plan. Although results indicate a majority of these institutions cover at least one lecture on TBI, the length of time does not appear to be sufficient to cover this topic in any great detail. Implications for all life care planners are discussed.

The need for life care planners who are knowledgeable about mild traumatic brain injury (MTBI) and the long-term symptomatology ramifications of the condition and how best to develop a life care plan regarding such cases is a topic that requires a strong knowledge base about the disability. Since MBTI often goes undiagnosed and cannot be found with an MRI or CT scan of the brain, neurologists, neuropsychologists, nurses, rehabilitation counselors and related disciplines who specialize in life care planning must grapple with what are the actual future needs of those with MTBI (Miller, 2001; Modlin, 1983; Weed & Berens, 2009). Researchers have shown the differences in subjective symptoms cited between individuals who sustain the same disability and are in litigation versus those who are not litigating their injuries, noting that plaintiff's often report greater maladjustment and loss of physical and/or mental abilities. This is also an issue in MTBI cases as well (Binder & Rohling, 1996; Binder & Willis, 1991; Green, Iverson, & Allen, 1999).

Statement of the Problem

The issue of malingering by an injured party involved in litigation is not a new concept (Fee & Rutherford, 1988; Lishman, 1978; Modlin, 1983; Resnick, 1988). Clinicians and researchers have been debating this topic for decades as they attempt to determine who is/who is not exaggerating an injury for financial gain (Miller, 2001). Modlin (1983) cited this growth in civil case lawsuits over 30 years ago, noting that besides divorce cases, civil cases of personal injury largely involving MTBI are the second most common suits in the country. Resnick (1988) states the actual incidence of malingering is unknown but estimated to be between 1% – 50%. Fee and Rutherford (1988) note that one-year post settlement, approximately one-third of litigants remain symptomatic, while two-thirds no longer report symptoms in post-concussion syndrome cases.

Complicating a definitive or objective way of measuring malingering, is what Miller (who has a PhD in neuropsychology and behavioral medicine) (2001) describes as the equivalent of the fast food industry with attorneys wanting quicker and less expensive reports from relevant experts. He notes lesser reliance on electroencephalograms, CT and MRI scans, and a greater reliance on neurologist and neuropsychologist independent medical evaluations. Miller argues the cookie-cutter cut-and-paste neuropsychological evaluations administered primarily by lesser skilled individuals who plug the numbers into test interpretation software, and spit out a report on which the neuropsychologist formulates conclusions and signs off are often not enough to definitively diagnose the condition. Regardless, MTBI and post-concussion syndrome research indicates mild cases cannot be readily or objectively seen on a CT or MRI scan (Evans, 1992). Evans (1992) notes the ongoing debate among neurologists and neuropsychologists regarding whether post-concussion syndrome and reported symptoms are an actual condition or not.

The purpose of the following paper is fourfold; a) to shed light on the sequelae of MBTI and the difficulties in assessing it; b) to discuss malingering and its implications in MBTI case; c) to report the results of a query to rehabilitation educators regarding how extensive their coverage of TBI is in their programs; and, d) how life care planners synthesize this information into a potential life care plan. This is illustrated with an actual defense rebuttal life care plan case study regarding MBTI and post-traumatic stress disorder (PTSD).

Mild Traumatic Brain Injury

Statistically, it is estimated about 76% of the estimated 400,000 annual head injury cases are mild in nature, often going undetected or evaluated if the injured party does not seemingly sustain or report any head trauma (Hunter-Schwartz, 2002; Miller, 1993). Of this population, approximately 75% fully recover within several months, while the remainder still report symptoms 12 months later (Levin et al., 1987). The symptoms typically reported by persons with TBI can be broken down by cognitions, behaviors, and affect. These symptoms are also often referred to as post-concussion syndrome.

Traumatic brain injury severity is clinically defined by loss or alteration of consciousness and posttraumatic amnesia (PTA). Mild TBI is defined as loss and/or alteration of consciousness for 30 minutes or less and posttraumatic amnesia of less than one hour (Ashley & Hovda, 2017; Berg, Franzen, & Wedding, 1987). The most common assessment of TBI by acute care medical staff is the Glasgow Coma Scale (GCS). It is comprised of a rating in three areas; eye response, motor response, and verbal response with scores ranging from 3-15. A MBTI score is generally 13 – 15, moderate score is 9-12, and a score under eight initially signifies a severe TBI. Post- traumatic amnesia is the second component, with 1 to 24 hours signifying moderate TBI, 1 to 7 days severe TBI, and greater than seven days a very severe TBI (Ashley & Hovda, 2017; Berg et al., 1987).

Cognitions generally reported about TBI with varying levels of intensity are short/long term memory problems, headaches, dizziness, poor judgement and problem-solving, poor concentration and attention (Miller, 2001). Common behaviors associated with TBI include social withdrawal, disinhibition and inappropriate sexual advances and at times childlike behavior, irritability and extreme fatigue. Emotions often described by persons with TBI include fear, generalized anxiety, depression, and dysthymia.

Complicating a diagnosis of MBTI, is a concomitant reported incidence of depression and anxiety (Deb, Lyons, Koutzoukis, & McCarthy, 1999; Whelan-Goodinson, Ponsford, Johnston, & Grant, 2009). Whelan-Goodinson et al. (2009) reported the incidence of diagnosed anxiety disorder between 23% – 38% within five years of the injury, and Deb et al. (1999) reported the incidence of depression between 14% – 61% diagnosed sometime between the first and eighth year post TBI.

Life Care Planning for TBI

Since MBTI and its symptomatology is difficult to objectively assess, and life care planners may or may not be well schooled or trained to distinguish nuances of this trauma, it behooves us to take a more proactive stance in educating ourselves. One need to look no further than our 2015 Standards of Practice for Life Care Planners (International Academy of Life Care Planners, 2015) and its Life Care Planning Consensus and Majority Statements (Johnson, 2015). Johnson (2015) notes that the Consensus statements adopted across life care planner disciplines must consider the integrity of the data they are reviewing; essentially knowing how to interpret what is and what is not reliable and valid and consistent with the empirical literature. Specifically, Johnson (2015, p. 36) cites the related standards including: (#55) utilize research for recommendations; (#56) the integrity of the data; (#65) utilize adequate medical and other data for opinions; and, properly inject personal expertise (#73). Concomitantly, life care planners must be careful when rendering differing opinions to remain within their area of expertise to avoid being challenged (Field, 2000). It is within all our areas of expertise however, to cite appropriate empirical research in justifying and validating our opinions. For example, a majority of neurology and neuropsychological studies indicate that individuals with TBI will see maximum recovery as the brain attempts to heal itself somewhere between 6 to 12 months medical care (Berg et al., 1987; Hunter-Schwartz, 2002). Anecdotally, in practice however, some evaluees subjectively report greater maladjustment or severe TBI symptoms with the passage of time when the literature contradicts such reports.

Malingering

Miller (2001, p. 116) defines malingering as "not a psychiatric disorder but a conscious and intentional simulation of illness or impairment for the purpose of obtaining financial compensation or other reward." Lipman (1962), however, notes that malingering is categorized in four ways. *Fabrication*, involves simply making up a story or lying. *Exaggeration* is described as someone who indicates his or her symptoms are much worse than they actually are. *Extension* is defined as an individual whose symptoms have completely resolved, however they continue to report experiencing them for gain. Finally, *misattribution* entails a previous or post-injury unrelated to the litigated date of injury where the individual was or has been injured but attributes his or her symptoms to the litigated date of injury.

As previously noted, the incidence of malingering is difficult to estimate. Mittenberg, Patton, Canyock, and Condit (2002) of the American Board of Clinical Neuropsychology estimate symptom exaggeration to range between 18% – 33%. Researchers have debated, however that quite often a patient's subjective complaints of TBI-related symptoms are difficult to assess by diagnostic imaging as well as neuropsychological testing. For rehabilitation counselors who develop life care plans, TBI is uniquely different from other tangible disabilities, such as a spinal cord injury or amputation.

Researchers have also explored the commonalities or constellation of circumstances surrounding persons who may be malingering (Hinnant & Tollison, 1994; Larrabee & Rohling, 2013; Marini, 2012; Miller, 1998; Miller, 2001; Resnick, 1988). Individuals who are involved in hazardous or physically arduous jobs and those who are dissatisfied with their jobs are thought to be indicators or motivators for individuals not wanting to return to work. Additionally, those who receive a sizable settlement may not need to return to work or the same work.

Rehabilitation Counseling Training

Prior to the summer of 2017, the majority of entry-level graduate rehabilitation counseling programs were 48 semester credit hours, many of which had a designated course covering the medical aspects of various disabilities, or combining it into a medical- psychosocial aspects of disability course. The second author who served for over a decade as an accreditation site visitor with the Council on Rehabilitation Education (CORE) and sat on the committee that reviewed all program status reports annually, observed that these were typical course offerings within the approximate 100 programs nationally. From this experience, the following research questions were posed with the following hypothesis:

HO: Rehabilitation counseling students lack the appropriate training foundation and/or experience in learning about TBI:

Research Questions

1. How many lectures and what length, if any, is devoted exclusively pertaining to TBI?
2. Is there a required practicum and/or internship available for students to work with persons recovering from TBI?
3. Are there any other opportunities for students either in or out of the classroom to gain knowledge or experience working with persons with TBI?

Method

This section addresses the methodology of the proposed research. Specifically, participant recruitment and demographics, materials and procedures, and data analysis.

Participants

Participants for this study consisted of a convenience sample of rehabilitation educators nationally in CORE-accredited programs who teach graduate level courses in rehabilitation counseling on their campus, either online or in class. Only professors who were in tenure-track positions and who taught content related to the medical aspects of disability and/or practicum/internship were solicited to partake in the study.

Materials

Participants were asked a number of demographic questions compiled by the authors concerning participant years teaching, academic rank, experience working with persons with traumatic brain injury, and the number of minutes or hours spent in their graduate programs teaching rehabilitation counseling students about traumatic brain injury. Some of these responses were quantified and used for frequency counts. There were also two qualitative questions: 1) Do students have the opportunity to complete a practicum or internship placement in a TBI setting or with such individuals, and if so, please explain in what capacity; 2) Are there any other learning opportunities for graduate students to learn about traumatic brain injury?

Procedure

Researchers first obtained approval from the Institutional Review Board and requested expedited review since no vulnerable population was being asked to participate. The above questions were posed in the form of an email noting voluntary participation. Researchers accessed online as many of the universities that teach graduate rehabilitation counseling, and obtained whatever emails were available from these institutions. Each tenure-track faculty contacted meeting the criteria were provided with an explanation of the study and provided full disclosure regarding the importance of their participation. Those educators who chose to participate responded to the email and informed consent to participate was explained and assumed by participants completing and returning the survey.

Data Analysis

This is a nonexperimental, qualitative and quantitative design study using a convenience sample of rehabilitation educators. Frequency counts regarding demographic questions noted earlier represent the quantitative portions of the study. Qualitative responses were evaluated by each of three researchers individually thereby looking for themes through triangulation.

Results

Of the 86 rehabilitation educators solicited to participate in this study, 27 returned completed responses for a 31% response rate across 17 states. All participants were tenure-track, and 45% had taught five years or more, 25% taught one to four years, and the remainder did not respond to the question. Regarding whether programs offered an entire course on TBI, none of them indicated they did, however, over 95% indicated they offered an entire lecture or part of a lecture. The average length of time TBI was covered in a lecture was 139 minutes or just over two hours, with a low of zero coverage in three programs, and a maximum of 360 minutes in one program. Seven programs covered 120 minutes of lecture on the topic, seven others covered 180 minutes on the topic, and four programs covered one hour on TBI. In addition, although many institutions offered a practicum and/or internship experience, participants in this open-ended comment question indicated these opportunities were rare and students had to seek them out themselves. Another common response was that students may or may not get that experience when they completed these practical experiences at public-sector vocational rehabilitation sites. See Table 1 for more detailed responses from all the institutions.

Discussion

Results of the present study indicate that rehabilitation educators do not appear to be providing adequate time, training, or internship experience in relation to the physiology and symptomatology of TBI. As a result, rehabilitation counselors who are life care planners and have not gained additional training and/or experience in TBI are clearly at a disadvantage distinguishing what may or may not be methodologically reliable and valid to include in a life care plan for someone with MBTI. They also may not know the appropriate consultation questions to ask of a neurologist or neuropsychologist regarding any future

medical or psychological care needs such evaluees may require. Weed (2007) in his Step-By-Step Guide has sample specific questions for neuropsychologists. In addition, Weed and Berens (2009, p. 366) similarly have a list of questions to ask various types of cross-discipline specialists when developing a life care plan. It behooves all life care planners in every discipline who do not have extensive experience or training in TBI to seek out this information outside of degree programs such as conferences devoted to TBI that earn CEUs, specific course work or a dedicated course to the topic at a postsecondary institution (such as the University of Florida online certificate training which covers the medical and psychosocial aspects of TBI extensively), purchase/read books dealing with TBI (for example Ashley & Hovda, 2017), and to carry out independent research on the topic.

Case Scenario

A relevant actual case scenario related to this topic is presented below:

Evaluee is a 45-year-old female truck driver with a 20-year truck driving experience, three MVAs prior to this litigated one, and witness to a past accident where a body was lying on the road. In the MVA in question, the injured party had lower extremity injuries but no broken bones. No spinal fractures or abnormalities noted in MRI and CT scans. There was, however, a 13-year history of medical visits for low back and neck chronic pain as well as questionable posttraumatic stress disorder (PTSD).

In the MVA in question, the injured party was taken to emergency room denying loss of consciousness, Glascow Coma Scale of 15, and subjective complaints of left tibia/fibula pain and left shoulder pain. Diagnostic testing showed no fractures or abnormalities, and the patient was released home. The following day, patient reports to a nurse practitioner with neck and back pain, chest contusions, left and right shoulder pain, but denies loss of consciousness.

On the third day postinjury, patient presents to nurse practitioner with dysarthric speech, incoherent, disoriented to time and place, and moderate left side facial droop related and noted as cerebrovascular accident (CVA). Following days note similar profound CVA type symptoms, however, CT and MRI brain imaging showed no acute abnormalities.

Plaintiff attorney retained a psychiatrist who performed a mental status exam and diagnosed severe brain injury, safety risk ambulating due to left-sided weakness, and likely PTSD. Treating neurologist found no evidence of brain injury but possible PTSD. Treating neuropsychologist indicated positive for PTSD, but inconsistencies in diagnostic profile indicating over-exaggeration of symptoms. Defendant-retained neuropsychologist found evidence of malingering with no evidence of brain injury. Follow-up treating neurologist concluded PTSD was related to previous MVAs and not the one in question, but enough emotional disturbance that the patient should not return to truck driving and had reached maximum medical improvement. Finally, defendant retained life care planner (second author) reviews a surveillance video after reading plaintiff's deposition regarding her perceived limitations, and surveillance video showed plaintiff driving, talking on the phone driving, shopping, climbing on a roof to do work, and climbing in a tractor bucket to tack an electrical wire to a pole. Plaintiff deposition indicates she had not driven due to PTSD from driving, has constant dizziness/vertigo, and during testing could not add and subtract.

Plaintiff-retained physician life care planner, during his deposition, admitted he had not read plaintiff deposition, preinjury medical records, treating neurologist reports, or reviewed surveillance video. Life care plan lifetime total is just under $1 million. He also opined plaintiff needs to reside in assisted living setting with 24/7 care available despite the fact plaintiff has lived alone since the accident independently. Life care planner also prescribed 90 days in a comprehensive TBI program as well as lifelong pain medications. Since retained life care planner is a physician, he recommends the entire life care plan without consulting with any treaters, based on education, training, and experience.

Case Analysis

In this actual case scenario, the life care planner needed to be aware of the various categories of TBI, diagnostic such as the Glascow Coma Scale, impact of loss of consciousness or lack thereof, PTSD, post-concussion syndrome symptoms, and knowledge of neuropsychological test results. The life care planner must also know what specific signs to look for in relation to TBI, read any prior medical records, and be able to differentiate reported subjective complaints versus diagnostic testing and imaging results. Of particular importance for nurse, physician, and all certified life care planners, is the need to consult/collaborate with treaters when needed. Further, in this particular case, the surveillance video was available to verify the exaggeration of all plaintiff symptoms. The judge presiding in this case, sided with the defendant attorney in his successful Daubert challenge and completely excluded the physician life care plan. The defendant life care planner assisted the attorney by providing her with detailed deposition questions for the plaintiff life care planner. In addition, the defendant life care planner in consulting with the defense attorney pointed out numerous pre-existing conditions of the plaintiff, inconsistencies in subjective complaints versus objective findings, and the inconsistencies in diagnostic reporting versus subjective complaints.

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Table 1.

Coverage of Traumatic Brain Injury in Graduate Rehabilitation Counseling Programs

Institution's home state	**Offer a course**	**Offer a lecture**	**Lecture # minutes**	**Offer practicum**	**Offer internship**	**# of courses TBI discussed**
Wisconsin	no	Yes	240 min	Yes	Yes	2
Arkansas	No	No	120 min	Yes (if the area permits)	Yes (if the area permits)	1 (not offered every semester)
Arkansas	No	Yes	60 min	No	No	2
Ohio	No	Yes	120 min	Yes (does not occur frequently)	Yes (does not occur frequently)	2
Texas	No	Yes	120 min	Yes *	Yes*	1
Michigan	No	No	0 min	Yes*	Yes*	0
Iowa	No	Yes	270 min	Yes	Yes	3
New York	No	Yes	120 min	Yes	Yes	1
Idaho	No	Yes	180 min	Yes*	Yes*	3
California	No	Yes	180 min	Yes	Yes	1
Utah	No	No	0 min	No	No	0
Washington	No	Yes	240 min	Yes	Yes	2
Texas	No	Yes	120 min	No	No	1
Virginia	No	Yes	150 min	Yes*	Yes*	1
Virginia	No	No	0 min	Yes*	Yes*	0
Illinois	No	Yes	240 min	No	No	4
California	No	Yes	180 min	No	No	1
Wisconsin	No	Yes	60 min	No	No	1
Ohio	No	Yes	60 min	No	No	1
Colorado	No	Yes	45-60 min	Yes	Yes*	1
Iowa	No	Yes	360 min	Yes*	Yes*	3
Virginia	No	Yes	150 min	Yes	Yes	1
Oklahoma	No	Yes	180 min	Yes*	Yes*	2
Washington	No	Yes	120 min	Yes*	Yes*	2
Louisiana	No	Yes	180 min	Yes*	Yes*	2
Ohio	No	Yes	180 min	No	No	2
Texas	No	Yes	120 min	No	No	1

Note: offer a course = yes/no; offer a lecture = yes/no; lecture number of minutes = actual number; offer practicum = yes/no or *rarely available; offer internship = yes/no or *rarely available; number of courses TBI discussed = actual number or not applicable.