

THE LNC NEWSLETTER

PRESENTED BY:

Medical-Legal Interface

Nurse Staffing, the Unending Tug-Of-War

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May 2005

Volume 4, Issue 8

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It is a problem that has plagued the clinical arena since the first nurse arrived at work. As part of the clinical staff, the front lines of healthcare, the nurse can often not understand how administration ever came up with the staffing plan for the shift. As part of the support and financial staff many managers and administrators have trouble understanding why the clinical staff always seems to want more.

The fact is that a hospital or other healthcare facility is a business, and as such has to be able to pay the bills in order to operate. However, even if the bills are being paid, the level of patient care must meet acceptable standards or

the need for the organization will be no longer. What has to happen is that both sides must learn to accept the concerns and beliefs of the other in order to find a common ground, a compromise that allows the facility to operate without putting the staff into a situation that jeopardizes patient safety and quality of care. Historically, however, facilities have placed more emphasis on the "bottom line" than the needs of the staff and patients. As LNCs we often see cases when this tug-of-war affects the care that was received and may have implications on the case at hand.

In 1999 the American Nurses Association (ANA) Cont on page 2

Mild Traumatic Brain Injury-Dispelling the Myths

Pattie Patterson RN, LNCC, CLCP

Mild traumatic brain injury (MTBI) occurs when the head is suddenly accelerated and/or decelerated during some type of accident. It does not have to be a direct hit to the head. This can occur with a whiplash type of injury, as this type of injury can cause the same kinds of shearing and twisting to the brain. The person does not necessarily have to lose consciousness either.

Mild traumatic brain injuries are one of the most misunderstood and often misdiagnosed phenomena. There are several reasons for this; the diagnostician may not truly understand the mechanisms of MTBI, often the symptomologies don't present themselves early on, but progressively and often the symptoms are more subtle, and the diagnostic testing used in diagnosing other more severe types of traumatic brain injuries may not "recognize" these subtleties in symptomology and may show the person normal, even though they may have suffered a major loss.

In 1993 the American Congress of Rehabilitation Medicine (ACRM) defined MTBI as "MTBI is a traumatically induced physiological

disruption of brain function which involves at least one of the following:

- Any period loss of consciousness.
- Any loss of memory for events immediately before of after the event.
- Any alteration in mental state at the time of accident (e.g. feeling dazed, disoriented or confused).
- Focal neurological deficit(s) that may of may not be transient.

But where the severity of the injury does not exceed the following:

- Loss of consciousness of approximately 30 minutes or less.
- After 30 minutes, an initial Glasgow Coma Scale (GCS) of 13-15.
- Post traumatic amnesia (PTA) not greater than 24 hours.

There are **3 grades of MTBI**:

- Grade 1 shows transient confusion with no loss of consciousness and a resolution of mental status abnormalities in less than 15 minutes.

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Gauging Responsibility in Worker's Compensation Claims

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published its position on the issue, *Principles for Nurse Staffing*. This position statement attempts to straddle the line between the financial concerns of the facility administration and the quality of care concerns of the nursing staff. The major conclusions of this statement were that:

- 1) Staffing levels should not depend on the payor;
- 2) Evaluation of staffing should include the nurses' quality of work as well as the patients' clinical outcomes;
- 3) staffing should be based on a combination of nursing competencies, patient outcomes, and organizational/facility goals and outcomes. They developed nine principles, divided into three categories related to the patient care unit, the staff, and the institution.

The needs of the patient care unit are determined by such factors as the total number of patients in the unit, the intensity of their needs (both individually and as a whole), and the functions of the unit that are necessary to deliver the needed care. What this means is that the staff must be able to provide care for each patient as well as support the unit as a whole. One of the most difficult things to do is predict what will happen during a shift that will cause either of these two factors to increase without warning. In order to adequately provide for the unit as a whole the staffing level must be high enough to continue to function even in the face of unexpected happenings.

The ANA also states that the practice of determining staffing needs through the use of nursing hours per patient day (HPPD) is inadequate in itself. While this practice seems to look at the needs of the entire unit it does not allow for individual patients who require higher-than-routine levels of care. It also fails to factor in the individual experience and skill level of the staff, and does not allow for unexpected urgent needs that arise during the shift.

Staff related issues look at the specific needs of the patients relative to the experience and competencies of the staff. The phrase "a nurse is a nurse is a nurse" is both belittling and patently untrue. As in any profession, there will be variations in the individual nurses' experiences, training, certifications, and abilities. When setting the staffing plan for a unit one must make sure that all required clinical skills and experiences are available in order to deliver the clinical services required by the patients. This requires that clinical nurses be included in management and executive ranks in order to properly assess those patient needs. If decisions are being made by those with no clinical experience and training, then inadequate staffing is more likely to happen. Institution related issues look at the organizational policies that govern its operation. These policies must place a high value on nurses and the skills and

knowledge they possess. The organization must develop and make uniform documented competencies for all nursing staff, and make sure that these skills are present during patient care. It is also important that all budgeted positions be filled in as timely a manner as possible.

This position statement from the ANA takes into account the fact that the patients, the clinical staff, and the organization itself all have needs that must be addressed in order to deliver adequate, timely care. When the staffing needs are determined for any given time period it is important that all of these needs be taken into account.

When reviewing a case file the LNC needs to assess the level of staffing for the specific unit, and explore how that staffing level was determined. This process has profound impact on an institution's liability and potential for litigation. For an attorney, this is an area that must not be overlooked. Overworked, unsupported, and stressed-out nurses do not deliver their optimal level of care. And that can leave the patient with a negative outcome that was entirely preventable.

Reference:

American Nurses Association (1999) *Principles for Nurse Staffing*. Available via www.nursingworld.org.

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- Grade 2 also has transient confusion with no loss of consciousness but the concussion symptoms or mental status abnormalities with amnesia last longer than 15 minutes.
- Grade 3 is depicted with some loss of consciousness whether for seconds or minutes.

Types of symptoms the person experiencing a MTBI may include:

- Dizziness-the most common cause of this is post-trauma vestibular system dysfunction, also known as benign positional vertigo.
 - ◆ Edema in the inner ear membrane causes dizziness with ringing in the ears (tinnitus), a feeling of fullness in the ear and low frequency hearing loss (Meniere's disease).
 - ◆ Perilymphatic fistula (hole in the eardrum) causes symptoms including vertigo, nausea, tinnitus and hearing problems.
 - ◆ Cervical vertigo causes dizziness from musculoskeletal neck injury from a whiplash type of injury.
- Musculoskeletal complaints such as in the neck, back or other areas of the body.
- Post-traumatic headaches are probably the most common pain symptom in MTBI. They usually occur within the first 14 days of the injury.

- ◆ Most post MTBI headaches originate from structures external to the brain and skull such as the muscles and ligaments attached to the skull spine and shoulder.
- ◆ Tension headaches are caused by stress and tension and are felt as a dull ache, which may be chronic or episodic.
- ◆ Migraine-type headaches come from a combination of tension and muscular.
- ◆ TMJ (temporomandibular joint) syndrome can originate from stretched and/or torn ligament structures of the jaw joint.
- Vision disturbances are often unrecognized after a MTBI, even if the injured party complains persistently.
 - ◆ Disturbances in eye movement, acuity and/or visual perception can contribute to headaches, task avoidance and fatigue.
- Balance and spatial disorientation may be related to vestibular dysfunction, visual disturbances, inner ear edema, perilymphatic fistula and/or other sensory deficits.
- Altered sense of smell and taste is another often unrecognized symptom after a MTBI.

- Hearing changes is another possible symptom.
- Fatigue can be caused by a number of factors.
 - ◆ Pain
 - ◆ Sleep disturbances
 - ◆ Depression
 - ◆ Sedative effects of some of the medications
 - ◆ Fluctuations in blood sugars
 - ◆ Fluctuations on blood pressure
 - ◆ Metabolic changes
 - ◆ Extra effort and time required to
 - Pay attention and concentrate
 - Organize and complete tasks
 - Thinking and recalling information
 - Attempting to keep up with their prior daily routines
 - Frustration and over-stimulation to busy environments
- Sensitivity to light, touch noise, crowds, movement and heights are frequently symptoms of a MTBI.
- Seizure disorders can occur with a MTBI.
- Cognitive and language deficits
 - ◆ Decreased attention/concentration
 - ◆ Perception
 - ◆ Memory
 - ◆ Executive functions
 - Decision making

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- Planning
 - Initiating and completing tasks
 - ◆ Speech/language
 - Conversation may be rambling or tangential
 - ◆ Reading and auditory comprehension problems
 - May avoid or decrease reading and/or listening conversations
 - May have an impaired ability to scan reading material or follow a moving object.
 - Psychosocial
 - ◆ Increased irritability
 - Angers easily
 - Contributing causes
 - Decrease processing speed
 - An inability to think and decide quickly
 - Fatigue
 - Pain
 - Sleep disturbances
 - Over-stimulation
 - Medication effects
 - Trying to keep pace with the pre-injury demands of family, work and social activities
 - Depression and anxiety
 - ◆ Others minimize the persons symptoms, telling him it will “disappear with time” or “nothing is wrong”.
 - ◆ Family, friends, co-workers, etc expect the person to perform like he did pre-injury.
 - ◆ Denial or minimization of symptoms by the MTBI person.
 - Amplification of symptoms
 - ◆ Somatization-if the person with MTBI feels no one is listening he may exaggerate his symptoms or may present with other physical symptoms.
 - ◆ Conversion disorder-the person unconsciously converts his anxiety producing psychological state into physical problems.
 - Malingering-this is rare and can be detected by a proper comprehensive evaluation conducted by a qualified professional.
 - Sleep disturbances can be caused by a variety of factors including:
 - ◆ Pain
 - ◆ Depression
 - ◆ Anxiety
- The most effective way to evaluate to evaluate a person with a possible MTBI is through comprehensive use of neurorehabilitation specialists. This team of specialists includes:
- Neurology
 - Psychiatry
 - Neuro-ophthalmology
 - Developmental optometry
 - Neuropsychology
 - Neuro-otology
 - Physical therapy
 - Occupational therapy
- Speech pathology
 - Counseling/psychotherapy
 - A good case manager
- Neurodiagnostic tools for assessing a MTBI include:**
- CT (computerized tomography) scan is primarily used to evaluate an acute TBI. It detects acute bleeding.
 - MRI (magnetic resonance imaging) provides a greater definition of lesions than the CT scan. It can assess cellular density as well as water diffusion and blood perfusion. It can also detect axonal shear injuries. It is the best tool to assess neurological changes in the post acute phase of recovery.
 - fMRI (functional magnetic resonance imaging) is a new diagnostic tool that can show metabolic changes in the brain tissue as the person performs functional tasks such as reading, listening, mental math, etc. This can be used to correlate with the neurological findings.
 - PET (positron emission tomography) provides a view of the brain’s metabolic status. It has also been found to correlate with the finding in the neuropsychological exam. Minor TBI without loss of consciousness can result in significant functional brain damage.
 - SPECT (single photon computerized tomography) detects areas of decrease blood flow which helps in diagnosing persistent post-concussion

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- syndrome beyond 3 months of the injury. It is less expensive, less complex and more available than the PET scan.
- Standard EEG (electroencephalogram) and QEEG (spectral analysis/quantitative electroencephalogram) are 2 other types of tools that can be used. The EEG measures electrical activity in the brain. The QEEG quantitatively measure the activity of the brain.
- ENG (electronystagmography) measure the constant involuntary eye movement of the eye while irrigating the ear with warm and then cold water. This detects the vestibular system dysfunction.
- VOR (vestibulo-ocular reflex) is used in detecting peripheral vs. central vestibular system damage.
- VAT (vestibular autorotation test) is a 15 second test that monitors the vestibulo-ocular reflex during natural motion. Many evaluators recommend VAT over ENG as it provides physiological information in 2 dimensions as opposed to the ENG which only provides a 1 dimensional view.
- Other diagnostic tools used to measure neurological dysfunction are based on brainstem evoked responses. These types of tests are helpful in assessing persons with possible auditory or vision problems or dizziness

of central vs. peripheral origin.

- Polysomnography evaluates the pattern of sleep disturbance such as nocturnal seizures, sleep apnea narcolepsy.

Evidence of minor cerebral injury is typically absent from the standard neurological examinations such as CT scans and standard EEGs but absence of evidence is not always proof of absence. This why so often persons with a MTBI are often misdiagnosed or the diagnosis is missed. This is why a comprehensive neuropsychological examination is so important.

In most first-time MTBIs the immediate symptoms will resolve themselves within three months, however when a MTBI is misdiagnosed, undiagnosed or ignored, it can create a gamut of problems. Those with repeat MTBIs have an increased potential for persistent problems, those being:

- Functional difficulties when trying to return to previous living patterns
- Depression and anxiety, which has an impact on the person's capacity to function
- Activity avoidance
- Estrangement from his/her spouse, children, family and friends. Tempers flare, fears build and the family structure may gradually deteriorate
- An increased frequency of anger at "the system". This includes physicians and insurance personnel who are knowledgeable and therefore

are not providing education or guidance as to appropriate assessment and beneficial treatment

- Suicidal ideation and attempts
- Problems with the law
- A tendency for re-injury

A return to the normal patterns of daily life and safe independent living requires a practical, individualized application of therapeutically-based treatment. This includes the assessment and re-establishment of structured routines in daily activities, community involvement, marriage/family dynamics, educational activities and vocation.

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For more information on brain injuries go to the brain injury association on the web.

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