

LETTER TO THE EDITOR

COMMENTS ON THE TASK FORCE REPORT ON MILD TRAUMATIC BRAIN
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The results of the Best Evidence Synthesis conducted by the World Health Organization Collaborating Centre Task Force on Mild Traumatic Brain Injury (MTBI), published in this journal in 2004 (suppl. 43), reflect work of exceptional magnitude. The analysis of existing scientific research literature on all aspects of MTBI (diagnosis, prognosis and treatment) was greatly needed. However, the results of such a process merit strong caution as to their possible clinical applications.

Thus, the following points should be considered:

- As mentioned by the authors themselves, there is variability in the definition of MTBI amongst the different papers reviewed (see ref. 1, p. 114), which render specific inter-study comparisons difficult.
- The prognostic factors studied in the articles retained for analysis are mostly medical/neurosurgical in nature (see ref. 2, tables, pp. 90–95), which can limit the conclusions as to global/functional outcome or prognosis.
- Some of the authors seem to critique the inclusion of factors such as emotional distress and pain-related symptomatology (amongst others) within the definition of poor outcome following MTBI (i.e. post-concussional disorder), and sometimes consider them as possibly confounding the true effects of MTBI (e.g. ref. 2, p. 101). In fact, such elements may be considered an intrinsic part of the complex clinical picture following complicated MTBI (i.e. post-concussive symptoms are not confounding effects, they are factors which need to be considered in order fully to understand outcome variability). Certainly, the criticism that many of the post-concussion symptoms are subjective and subject to recall or selected differences in reporting is a valid one (see ref. 2, p. 89). On the other hand, the use of subjective criteria is far from being an isolated case in the medical literature (e.g. post-traumatic

stress disorder) and one cannot dismiss the initial causative nature of the MTBI in bringing about these latter symptoms. Regardless of underlying etiology, from a strictly clinical standpoint (by contrast with a medico-legal viewpoint), it is interesting to note that several studies (retained within this review) emphasize that self-reported symptoms are some of the most consistent predictors of future difficulties (3, 4).

- In general, in the studies reviewed, all MTBI patients are confounded and those not recuperating well (e.g. those with significant post-concussive symptoms >3 months post-TBI) are not considered as a separate group, thus masking potentially strong statistical effects. Regarding this point, it is interesting to note that some studies (e.g. ref. 3) have suggested that functional recovery may evolve very differently between these 2 groups over time.
- There are no retained articles proposing theories or models to explain the complex multifactorial nature of MTBI. Once again, from a clinical standpoint, this is an important aspect as some models have suggested an evolving etiology for the development of post-concussion symptoms over time. For example, Kay (5) has suggested that although the initial trauma may well be neurological in nature (causing the initial symptoms within the first few weeks), psychological factors may slowly and gradually take over as the primary underlying cause, particularly in cases of poor outcome following MTBI.
- The authors state that results indicate no evidence for providing routine intensive treatment in the overall MTBI population (see ref. 6, p. 83), but they do not advance the possibility of identifying and intervening with those individuals with potentially negative prognostic indicators (i.e. those who make up the 10–15% or so of MTBI individuals who do not recuperate well). We are in full agreement with Borg et al.'s recommendation (p. 82) that intervention with patients with uncomplicated MTBI (i.e. which constitute the majority) be limited to information regarding symptoms, reassurance and further resource information. However, the difficulty as to what exactly constitutes a “complicated” MTBI remains unresolved, particularly with regards to intervention.
- This work was funded primarily by private parties and one of its principal mandates was to evaluate the economic costs related to the treatment of MTBI (6).

The results of this Best Evidence Synthesis are of great value in terms of overcoming past mistakes and properly orienting future MTBI research. However, in our opinion, they should not be used to dictate clinical and treatment standards (particularly at administrative decisional levels) as has been indicated by the authors.

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RESPONSE TO MCKERRAL ET AL.'S LETTER TO THE EDITOR

We appreciate the letter by McKerral et al., highlighting several important issues in our Task Force Report on Mild Traumatic Brain Injury (MTBI), and would like to make some comments and clarifications.

Emotional distress and pain-related symptomatology certainly do appear to be an intrinsic part of a complex clinical picture in those individuals with poor outcome after MTBI. However, the question of exactly what is causing this poor outcome remains unanswered. This does not imply that the persistent symptoms experienced by some individuals are somehow not “real”; but, in order clearly to attribute the poor outcome to the MTBI itself, other potential factors causing or contributing to this poor outcome need to be ruled out. Identification of factors leading to or contributing to poor outcome is a crucially important area that deserves further attention from the MTBI research community.

We agree and recommend that identifying prognostic factors for recovery be seen as a priority in research (ref. 1, pp. 117–118). Identification of modifiable prognostic factors is important in identifying potential targets for effective interventions and prevention of poor outcome.

We agree that theories and models are important, and can guide research. A review of current theories in this area would be of value, although it was beyond the scope of our Task Force.

We do advocate identifying and intervening with those

individuals with negative prognostic indicators (ref. 1, p. 118). However, at present our ability to identify those individuals is restricted by our limited knowledge of what those negative prognostic indicators are. It is likely (but not certain) that early intervention of the right sort in those individuals at highest risk of delayed or inadequate recovery would be helpful in preventing poor outcome. However, we are far from being able accurately to identify those individuals, nor do we yet have a clear evidence base on which to determine the best intervention or the best timing of that intervention. In our opinion, these questions deserve immediate attention in order to avoid or alleviate suffering in those individuals with poor recovery.

One of our mandates was to evaluate the economic costs of MTBI in general, including (but not limited to) healthcare costs. This is the area in which we found the fewest studies, and our ability to report on the overall costs of MTBI was therefore very limited.

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