LETTER TO THE EDITOR

Predicting Fall Risk

In their article "Falls risk factors in an acute-care setting: A retrospective study," Stevenson, Mills, Welin, and Beal (1998) comment on use of the Morse Fall Scale (MFS) (see Morse, Morse, & Tylko, 1989). I quote: "McCollam found that the MSF did identify those most at risk of fall [sic], *but* also found that the cut-off score for risk of fall had to be modified for different types of patient-care units" (p. 99, italics added). It is important that the following points be noted about McCollam's testing of the scale and its use:

(1) Fall risk varies with patient populations. While my research has done much to identify normative scores for various populations, it is recommended that scores for determining risk be established for each patient-care unit. Setting the scale at a level that will determine those most at risk of falling on a stroke unit will be virtually useless in determining fall risk on a general medical or surgical unit, psychiatric unit, or maternity unit, where there is a greater proportion of the normal and weak scores and the distribution of the fall scores is quite different. Recommendations for determining risk is an *administrative* decision, made according to the level of risk to be assumed by the institution, resources available for fall prevention programs, and so forth. Full instructions for determining level of risk ("cut-off scores") have been published (Morse, 1986, 1997), as have the distribution of scores for several types of patient populations.

(2) In her study, McCollam (1995) did not use the MFS scale according to instructions. For determination of high risk she selected a score of 55. This score is *off the scale* according to any of the published data and any published instructions regarding the calibration and use of the MFS. This is a serious concern, for both research replication and patient safety. Following the publication of her results, I requested that McCollam rerun her data according to published guidelines and republish, but she did not respond and has not, to my knowledge, corrected her analysis.

(3) Researchers continue to ignore the fact that there are *different causes* of patient falls (see Morse, Tylko, & Dixon, 1987). The MFS predicts *anticipated physiological falls* (i.e., 90.1% of falls in my study). The MFS cannot predict *accidental falls* or *unanticipated physiological falls.*

Therefore, the predictive ability of the MFS scale will never be 100%. In order to determine "success," fall programs must analyze their results according to this classification scheme.

I remain puzzled that, given the interesting predictive ability of the MFS and the reliability and validity data available for the scale, researchers waste their time on retrospective studies. Stevenson et al. (1998) are aware of and acknowledge these limitations. The MFS was developed from a controlled study using a large number of variables and multivariate and computer modelling. It has been extensively trialled and is quick and easy to use. All of the publications from this research program have now been brought together in a single volume written to the level of implementation for clinicians, so let us do just that: implement.

One other point. In their discussion, Stevenson et al. (1998) suggest that "misperceptions of functional ability" may be important. This factor is already included in the MFS (developed more than 13 years ago) as the means of measuring the variable *mental status.*

Please, let us do our homework before beginning a project, and let us calibrate assessment scales according to published instructions. We must evaluate the literature fairly, replicate responsibly, and spend our limited research energies and resources wisely.

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