

A patient report measure for the quantification of chemotherapy induced nausea and emesis: psychometric properties of the Morrow assessment of nausea and emesis (MANE)

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The accurate assessment of antiemetic efficacy is directly dependent upon the reliability and validity of endpoint measures. As highlighted in the literature and supported by papers at the symposium (Morrow, 1991; Martin, 1991) the assessment of chemotherapy related side effects remains a lively and important part of clinical care.

There is little consensual agreement on specific aspects of assessment. While, for example, counting the number of vomiting episodes is a reasonably reliable assessment technology, a recent study (Bonnetterre *et al.*, 1991) indicated clearly that a patient's ratings of antiemetic efficacy are based almost solely on changes in self report nausea. Conversely, physician assessment of antiemetic efficacies were based primarily upon reduction of number of vomiting episodes. This potential divergence of criteria points to the need for assessment that captures both individually countable episodes (such as vomiting) as well as giving the patient the ability to respond to subjective experience (feelings of nausea).

The Morrow Assessment of Nausea and Emesis (MANE) was designed for such a purpose. Originally reported in Cancer, 1984, this instrument is a brief 17-item assessment of the frequency, severity and duration of pre- and post-chemotherapy related nausea and vomiting.

Shown as Figure 1 below, the instrument has the patient fill in the duration of nausea and then choose descriptive words for its severity.

Test re-test reliabilities have been shown generally adequate (Morrow, 1984; Carnrike *et al.*, 1990). Generally higher values have been shown for anticipatory nausea and post-treatment nausea than for anticipatory emesis and post-treatment emesis.

Validity has been examined in a variety of ways. The concurrent validity between the MANE and continuous self-monitoring of patients has been reported to be moderate by Carnrike *et al.*, 1988 in a study of 35 outpatients receiving chemotherapy. They also reported validity examinations from a multi-trait, multi-method correlation matrix. Sensitivity to, clinical change has been shown through the instruments use as an outcome measure in an increasing variety of studies of both pharmacologic and behavioral interventions for the reduction of nausea and emesis (Dobkin & Morrow, 1988).

The MANE appears to be a reasonable instrument to consider for the use in antiemetic studies of chemotherapy induced nausea and emesis.

References

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MORROW ASSESSMENT OF NAUSEA AND EMESIS FOLLOW UP

These questions will ask about nausea and vomiting separately. NAUSEA is feeling sick to your stomach; VOMITING is actually throwing up. Please circle or fill in the corresponding number.

1. Did you experience NAUSEA during or after your last chemotherapy treatment?

- 1. yes (6)
- 2. no (if no, please skip to question #2)

How long did the NAUSEA last? _____ hours (7,8)

How would you describe the NAUSEA at its worst?

- 1. very mild
- 2. mild
- 3. moderate
- 4. severe (9)
- 5. very severe
- 6. intolerable

When was the NAUSEA the worst?

- 01. during treatment
- 02. 0-4 hours after treatment
- 03. 4-8 hours after treatment
- 04. 8-12 hours after treatment (10,11)
- 05. 12-24 hours after treatment
- 06. 24 or more hours after treatment
- 07. no time more severe than any other

2. Did you experience VOMITING during or after your last chemotherapy treatment?

- 1. yes
- 2. no (if no, please skip to question #3) (12)

How long did the VOMITING last? _____ hours (13,14)

How would you describe the VOMITING at its worst?

- 1. very mild
- 2. mild
- 3. moderate
- 4. severe (15)
- 5. very severe
- 6. intolerable

When was the VOMITING the worst?

- 01. during treatment
- 02. 0-4 hours after treatment
- 03. 4-8 hours after treatment
- 04. 8-12 hours after treatment (16,17)
- 05. 12-24 hours after treatment
- 06. 24 or more hours after treatment
- 07. no time more severe than any other

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3. Did you experience NAUSEA before your last chemotherapy treatment?

- 1. yes (18)
- 2. no (if no, please skip to question #4)

How would you describe the NAUSEA before treatment?

- 1. very mild
- 2. mild
- 3. moderate
- 4. severe (19)
- 5. very severe
- 6. intolerable

How many hours before treatment did it first occur? _____ hours (20,21)

4. Did you experience VOMITING before your last chemotherapy treatment?

- 1. yes (22)
- 2. no (if no, please skip to question #5)

How would you describe the VOMITING at its worst before treatment?

- 1. very mild
- 2. mild
- 3. moderate
- 4. severe (23)
- 5. very severe
- 6. intolerable

How many hours before treatment did the VOMITING first occur? _____ hours (24,25)

5. Did you take medication for NAUSEA and/or VOMITING for your last treatment?

- 1. yes (26)
- 2. no

If yes, was it useful?

- 1. very (27)
- 2. somewhat
- 3. works a little
- 4. doesn't seem to help

Thank You