

Facial Disability Index for a Patient with Facial Neuromuscular Dysfunction

Overview: The Facial Disability Index can be used to evaluate the impairment a patient has because of a facial neuromuscular disorder. This can be used over time to monitor the course the condition and any response to interventions. The authors are from the University of Pittsburgh.

Subscores:

(1) physical function

(2) social functioning and well-being

Responses are based on the level of functioning experienced during the past month.

Physical functioning:

(1) How much difficulty did you have keeping food in your mouth moving food around in your mouth or getting food stuck in your cheek while eating?

(2) How much did you have drinking from a cup?

(3) How much difficulty did you have saying specific sounds while speaking?

(4) How much difficulty did you have with your eye tearing excessively or becoming dry?

(5) How much difficulty did you have with brushing your teeth or rinsing your mouth?

Responses	Points
usually did with no difficulty	5
usually did with a little difficulty	4
usually did with some difficulty	3
usually did with much difficulty	2
usually did not do because of health	1
usually did not do for other reason	0
not applicable	NA

subscore for physical function =

= SUM(points for questions 1 to 5)

Social Functioning and Well-Being Questions:

(6) How much of the time have you felt calm and peaceful?

(7) How much of the time did you isolate yourself from people around you?

(8) How much of the time did you get irritable towards those around you?

(9) How often did you wake up early or wake up several times during your nighttime sleep?

(10) How often has your facial function kept you from going out to eat shop or participate in family or social activities?

Responses	Positive Points	Negative Points
none of the time (no night in #9)	6	1
a little bit of the time (a few nights in #9)	5	2
some of the time (some nights in #9)	4	3
a good bit of the time (a good number of nights in #9)	3	4
most of the time (most nights in #9)	2	5
all of the time (every night in #9)	1	6
not applicable	NA	NA

positive direction: 7 8 9 10

negative direction: 6

subscore for social functioning and well-being = SUM(points for questions 6 to 10)

Interpretation:

- minimum score for physical functioning: 0
- maximum score for physical functioning: 25
- minimum score for social and well-being: 5
- maximum score for social and well-being: 30

physical functioning score as percent functional ability = $\frac{((\text{total subscore}) - (\text{number of questions answered}))}{(\text{number of questions answered})} * (100 / 4)$

where: The minimum percent physical functioning is (-25%) if the patient did not do any of the activities for "other reasons". This is if the instructions given are followed. However if it is assumed that these items are not applicable then everything works fine. Social functioning and well-being score as percent functional ability = $\frac{((\text{total subscore}) - (\text{number of questions answered}))}{(\text{number of questions answered})} * (100 / 5)$

References:

Brach JS VanSwearingen JM et al. Impairment and disability in patients with facial neuromuscular dysfunction. *Otolaryngol Head Neck Surg.* 1997; 117: 315-321. (Appendix C 321)

VanSwearingen JM Brach JS. The Facial Disability Index: Reliability and Validity of a disability assessment instrument for disorders of the facial neuromuscular system. *Physical Therapy.* 1996; 76: 1288-1300 (Appendix 1297)