

Usefulness of the Symptom Frequency and Bothersomeness (SFB) Scale in Clinical Practice

Grove A, Martin ML, Budhiarso I, Buesching D, Patrick DL

BACKGROUND

The Symptom Frequency / Bothersomeness (SFB) scale was developed to measure the impact of Urinary Incontinence (UI) on quality of life through the frequency of symptoms and quality of life through the level of psychological distress or bothersomeness experienced by patients as a result of their symptoms.

The SFB is a dual scale which is based on a list of 20 symptoms experienced by patients with different types of urinary incontinence (stress, urge and mixed) and painful irritable bladder syndromes (PIBS). Patients are asked to indicate both how frequently they experience these symptoms and the extent to which they are bothered by them.

METHODS

Patients were recruited via local clinic referrals, newspaper advertisements and urology clinic referrals in Seattle and Philadelphia. Patients were over 18 years of age and were currently experiencing symptoms of stress, urge or mixed incontinence.

At the baseline appointment, patients completed the SFB, the Medical Outcomes Trust Short Form 36-Item Health Status Survey (SF-36), the Incontinence Quality of Life measure (I-QOL) and other demographic questions. All of these measures were self-administered. A follow-up assessment using the SFB was made by mail about one month after the baseline.



THE INSTRUMENT

SYMPTOMS LIST

1. Loss of urine with activity
2. Loss of urine before reaching the bathroom
3. Inability to stop leakage once it starts
4. Sudden strong urge to urinate
5. Urinate more often than every three hours
6. Difficulty starting urination (even if urge is strong)
7. Urine stream starts / stops (not continuous)
8. Strain to complete urination
9. Feeling of incomplete emptying
10. Loss of urine at night while sleeping
11. Getting up more than once at night to urinate
12. Unable to concentrate or ignore the urge to urinate
13. Bladder pain or cramping
14. Pain with urination
15. Lower back pain related to bladder condition
16. Pain during intercourse
17. Pain after intercourse
18. Burning sensation with urination
19. Burning sensation after urination
20. Sensation of bladder pressure

Patients are asked to respond to each of these items in terms of both frequency and bothersomeness:

SCALE 1 - FREQUENCY

How often in the past month (30 days) did you have any of these symptoms?

Never / Seldom / Sometimes / Often / Always

SCALE 2: BOTHERSOMENESS

When you have experienced these symptoms, how bothersome were they?

I do not have the symptom / Not bothersome / Somewhat bothersome / Extremely bothersome

TABLES

Table 1: Internal Consistency and Retest Reproducibility

Scale	No Items in Scale	Alpha Coefficient	Average Retest Period	ICC
SFB Frequency	20	0.89	30 days	0.88
SFB Bothersomeness	20	0.88	30 days	0.77

Table 2: Correlations with the SF-36 and the I-QOL

SFB Scale	SF-36 Physical Component Scale		I-QOL	
	Correlation	Significance	Correlation	Significance
Frequency	-0.55	p<0.0001	-0.47	p<0.01
Bothersomeness	-0.53	p<0.0001	-0.46	p<0.01

Table 3: I-QOL Levels of Severity

I-QOL Tertile	N	SFB Frequency Scale		SFB Bothersomeness Scale	
		Mean (SD)	F-Statistic	Mean (SD)	F-Statistic
5.68-48.86	14	42.7 (18.4)	6.20 (p<0.01)	47.4 (18.2)	4.45 (p<0.05)
48.87-63.64	15	37.2 (14.2)		40.3 (13.4)	
63.65-84.09	12	22.6 (10.3)		28.7 (16.4)	

RESULTS

Both the frequency scale and the bothersomeness scale were shown to be internally consistent and have high reproducibility over a 30 day retest period (Table 1). They were also found to be associated with the SF-36 Physical Component scale and the I-QOL (Table 2). In addition, both scales were found to be able to discriminate between the I-QOL tertiles of level of severity (Table 3).

POTENTIAL USEFULNESS OF DUAL SCALES IN CLINICAL PRACTICE

Dual scales, which elicit information about both the frequency of symptoms and the extent to which patients experience symptom-related distress, have many potential uses in clinical practice. The SFB, for example, could be used in a number of ways:

- ✓ **As an indication of possible diagnosis**
The pattern of frequency of symptoms reported by the patient in the SFB would inform the clinician about which symptoms are present and absent, and thus provide a profile of patient symptomatology. This may help to identify the type of incontinence or urological problem the patient is experiencing.
- ✓ **To direct the treatment choice**
The SFB indicates which symptoms are most frequent and which are most bothersome for the patient, thus highlighting which treatment modality may provide the greatest easement to the patient.
- ✓ **To monitor treatment appropriateness / effectiveness**
The SFB can be completed by a patient at the point of diagnosis and again during the treatment program to see whether any impact has been made on those symptoms which were most frequent or bothersome for the patient prior to treatment.
- ✓ **To assess symptomatology and well-being over time**
The SFB could be used to assess the pattern of a patient's symptoms at a given point in time and thus, if completed regularly, may provide a picture of the changing pattern of the patient's symptomatology over time and enhance the available information supporting clinical decision-making.