SCALING AND SCORING OF THE

King's Health Questionnaire (KHQ)

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The King's Health Questionnaire is composed of 21 items investigating 9 domains.

DESCRIPTION OF THE QUESTIONNAIRE:

The King's Health Questionnaire is composed of 3 parts:

Part I: General health perception and Incontinence impact.

Part II: Role limitations, Physical limitations, Social limitations, Personal relationships, Emotions, Sleep/Energy, Severity measures

Part III: Symptom severity scale, a list of 10 bladder problems plus an 'other' category that can be specified by the person using the questionnaire.

Domains	Number of Items	Cluster of Items	Item Reversion	Direction of Domains
General health perceptions	1	1	No	
Incontinence impact	1	2	No	
Role limitations	2	3a-3b	No	
Physical limitations	2	4a-4b	No	
Social limitations	2	4c-4d	No	Lower score = better QoL
Personal relationships	3	5a-5c	No	
Emotions	3	6a-6c	No	
Sleep/Energy	2	7a-7b	No	
Severity measures	5	8a-8e	No	

SCORING OF DOMAINS AND OF THE SYMPTOM SEVERITY SCALE :

Item scaling	- 5-point Likert scales for the General health perceptions domain - 4-point Likert scale plus a "Not applicable" option for the Personal relationships domain - 4-point Likert scales for the seven other domains - 3-point Likert scale for the Symptom severity scale
Weighting of items	No
Extension of the Scoring Scale	- Range of the domains scores. 0 (best) to 100 (worst) - Range of the Symptom severity scale score: 0 (best) to 30 (worst)
Scoring Procedure	Each domain is scored separately according to the following procedure: *Part I:*

- General health perceptions

Very good	1
Good	2
Fair	3
Poor	4
Very poor	5

Score = [(Score to Q1 – 1)/ 4] x 100

- Incontinence impact

Not at all	1
A little	2
Moderately	3
A lot	4

Score= [(Score to Q2 – 1)/ 3] x 100

Part II:
- Role limitations

Not at all	1
Slightly	2
Moderately	3
A lot	4

Score= [((Score to Q 3a +Q 3b) – 2) /6] x 100

- Physical limitations

Not at all	1
Slightly	2
Moderately	3
A lot	4

Score= [(Score to Q 4a +Q 4b) – 2) / 6] x 100

- Social limitations

Not at all	1
Slightly	2
Moderately	3
A lot	4

If Q5C≥ 1   Score= [(Score to Q 4c +Q 4d + Q5c) – 3) / 9] x 100
If Q5C= 0   Score= [(Score to Q 4c +Q 4d) – 2) / 6] x 100

- Personal relationships

Not applicable	0
Not at all	1
Slightly	2
Moderately	3
A lot	4

If Q5a+Q5b≥ 2   Score= [((Score to Q 5a + Q5b) – 2) / 6] x 100
If Q5a+Q5b= 1   Score= [((Score to Q 5a + Q5b) – 1) / 3] x 100
If Q5a+Q5b= 0   Treat as missing value

- Emotions

Not at all	1
Slightly	2
Moderately	3
Very much	4

Score= [((Score to Q 6a +Q 6b + Q6c) – 3) / 9] x 100

	- Sleep/energy
	      Never 1
	      Sometimes 2
	      Often 3
	      All the time 4
	Score= [(Score to Q 7a +Q 7) – 2) / 6] x 100
	
	- Severity measures
	      Never 1
	      Sometimes 2
	      Often 3
	      All the time 4
	Score= [((Score to Q 8a +Q 8b + Q8c + Q8d + Q8e) – 5) / 15] x 100
	
	The Symptom severity scale (*Part III*) is scored as follows:
	      A little 1
	      Moderately 2
	      A lot 3

Interpretation and Analysis of missing data	Missing responses for questions in a summated domain (i.e., all domains except the Symptom severity scale) are imputed if at least half of the items in the domain had non-missing responses by using the mean value of responses to other items within the same domain. Otherwise the domain score is set to missing. Omitted responses for the Symptom severity scale receive a score of 0 and are assumed to be non-problematic for the respondent.
Interpretation of multiple answers for one item	What to do when more than one answer is ticked by the patient (adjacent answers or not)
Interpretation and Analysis of 'non-concerned' answers	"Non-concerned" answers are response options designed for responders who feel that a question does not apply to them, is irrelevant, not applicable. To be completed only if "non concerned" answers are included in the instrument If yes: explain interpretation and analysis If not: line to be removed

REFERENCE(S):

Kelleher CJ, Cardozo LD, Khullar V, Salvatore S. A new questionnaire to assess the quality of life of urinary incontinent women. Br J Obstet Gynaecol 1997; 104:1374-1379.

COPY OF THE QUESTIONNAIRE TO BE ADDED