
The Measurement of Quality of Life: Clinical Use of the *Utian Quality of Life Scale*

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Optimal care of women through the menopausal transition requires monitoring and measurement of changes across the domains of physical, behavioral, cognitive and emotional functioning. The importance of broadband assessments in the effective practice of menopausal medicine has been widely recognized in the growing literature on quality of life (QOL). *Never has clinical evaluation of quality of life been more pivotal than at this time when the use of hormone treatment strategies has come under fire and patients and physicians alike are seeking evidence of positive outcomes.*

The Utian Quality of Life Scale (UQOL) is a well-validated, clinically useful tool that can complement a symptom inventory to provide a broad overview of menopausal status.

Introduction

Maintaining optimal quality of life (QOL) is a priority for women as they negotiate perimenopause in partnership with the health professionals who provide their care. A woman's perception of her QOL incorporates a variety of factors including, but not limited to, menopausal symptoms. An integrated view of QOL incorporates domains more broadly reflecting biopsychosocial functioning. This panoramic perspective allows us to more fully appreciate our patients' sense of satisfaction with the health care they receive. For example, we know that a woman's perception of her QOL can influence her adherence to a prescribed care plan. If a woman believes that treatment will decrease distress now or in the future, she may be more likely to adhere to a suggested treatment approach.¹ Moreover, women seem to value health care services to the degree that they experience improved QOL in relation to the treatment they receive.² On the other hand, adherence will suffer when treatments produce problematic side effects or when patients fear long-term health complications.³

Menopausal medicine will be enhanced as providers accurately measure perceptions of *feelings of well-being* and incorporate them into a woman's care plan to better meet her health care needs and improve her QOL. To appreciate a woman's global sense of well-being is to establish a strong foundation for serving her needs.

Unfortunately, there has been little consensus in the literature about how to define QOL. Measures of QOL tend to be either checklists of symptom, measures of the impact of a particular disease's symptoms or health status or reviews of general well-being.⁴ Perhaps the most frequent criticism of the QOL construct is that it remains vaguely conceptualized and understood differently across medical specialties.⁵ Traditionally, medicine has used biomedical measurements to assess QOL and, while

these measures are a necessary component in the determination of health status, they are not sufficient to accurately reflect a global sense of well-being.

Development of the UQOL

The Utian Quality of Life Scale (UQOL) was developed with a series of objectives in mind. The ideal instrument would capture influences on sense of well-being from a variety of domains that would be empirically determined. It would complement a symptom inventory and have sound psychometric properties, allowing users to be confident that the instrument was both valid (measuring what it purports to measure) and reliable (producing values that remain consistent over a series of repeated measurements). Finally, the instrument should be practical to administer and easy to score.

A comprehensive review of scale design and construction is beyond the scope of this article.⁶ However, the following section presents a brief overview of the steps taken to construct the UQOL. First, several senior clinicians selected a large pool of items that then were reviewed for content and wording by a focus group comprised of perimenopausal women. This process produced a set of 40 items that were administered to 327 female subjects aged 45 to 65, selected to ensure geographic, racial and economic diversity. The responses were item analyzed to eliminate redundant or non-useful items and factor analyzed to determine which factors or domains of QOL emerged. We subsequently administered the resulting 23-item scale to a second sample of 270 women to verify the domains and establish validity and reliability.

Table 1 lists the four domains identified from this process. The domain titles (e.g., Occupational QOL) were derived from the authors' best sense of what each set of items encompassed.

Scoring the UQOL

Each question on the UQOL is

answered with a 5-point Likert-type score, ranging from "not true of me" to "very true of me." Domain scores are derived by adding the item scores specific to that domain. Negative item (that is, items that are worded in the negative rather than positive direction) scores are reversed. The scoring algorithm was designed to be computer scored in the research context.⁶ Provided here is a clinically useful shortcut to the more cumbersome complete scoring protocol. Each of the domains is color-coded so that patients' answers can be easily summed and plotted on the domain summary.

The UQOL can be rapidly scored by having the patient complete the photocopied-non-colored version. A medical assistant then transfers the scores to the color scoring chart (in order to correctly sum the reverse scored items). The scores for the 4 domains and the total score then are easily summed and plotted.

In clinical practice, we recommend that the UQOL instrument be administered during the first office visit for new patients seeking help with the management of menopausal symptoms. For established patients, the measure should be administered as they approach the onset of menopause but before they voice menopausal complaints. The first time the measure is administered provides an excellent opportunity to describe broadband QOL assessment to the patient. Not only will this conversation create the optimal context for engaging the patient in the assessment process, it is also an effective means of communicating the clinician's concern for the patient's sense of well-being. For subsequent visits, the measure should be completed and scored before the patient is seen. Results then can be plotted and compared to previous visits. An ongoing record of QOL scores permits tracking over a period of years and enables this information to form the basis of doctor-patient discussions

Table 1.
Item Content and Factor Loadings of the UQOL

Scale Item	Factor Loading
<i>Factor 1. Occupational Quality of Life</i>	
I feel challenged by my work.	0.76
I believe my work benefits society.	0.77
I have gotten a lot of personal recognition in my community or at my job.	0.68
I am proud of my occupational accomplishments.	0.77
I consider my life stimulating.	0.52
I continue to set new personal goals for myself.	0.64
I continue to set new professional goals for myself.	0.75
<i>Factor 2. Health Quality of Life</i>	
I am unhappy with my appearance.	0.62
My diet is not nutritionally sound.	0.61
I feel in control of my eating behavior.	0.75
Routinely, I engage in active exercise three or more times each week.	0.53
I believe I have no control over my physical health.	0.56
I feel physically well.	0.61
I feel physically fit.	0.81
<i>Factor 3. Emotional Quality of Life</i>	
I am able to control things in my life that are important to me.	0.48
My mood is generally depressed.	0.76
I frequently experience anxiety.	0.71
Most things that happen to me are out of my control.	0.57
I currently experience physical discomfort or pain during sexual activity.	0.48
I expect that good things will happen in my life.	0.67
<i>Factor 4. Sexual Quality of Life</i>	
I am not content with my sexual life.	0.92
I am content with my romantic life.	0.90
I am content with the frequency of my sexual interactions with a partner.	0.86

about strategies for navigating the menopausal transition.

Symptom Inventory Complement to the UQOL

There are numerous symptom inventories that can be employed in conjunction with the UQOL. The most widely utilized symptom inventory for perimenopausal women is the Greene Climacteric Scale, which is brief and easily administered and scored.⁷ Used in conjunction, the UQOL and the Green Climacteric Inventory create a meaningful, integrated broadband assessment of climacteric status.

Conclusion

The UQOL is a 23-item questionnaire with a stable factor structure, demonstrating 4 separate, intercorrelated domains: Occupational QOL (e.g. “I feel challenged by my work”); Health QOL (e.g. “My diet is not nutritionally sound”); Sexual QOL (e.g. “I am content with my romantic life”); and Emotional QOL (e.g. “My mood is generally depressed”). It has been demonstrated to be a practical and psychometrically sound instrument for measuring quality of life. ■

The authors grant clinicians and researchers free utilization of the UQOL, but they request appropriate acknowledgment in any publications utilizing the instrument.

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Utian Quality of Life Scale (UQOL)

Please rate the degree to which you agree with the following statements, as they apply to you *within the past month*. Be sure to *answer every question!* Please circle your answer using the following 5-point scale:

	1	2	3	4	5
	Not true of me		Moderately true of me		Very true of me
1. I am able to control things in my life that are important to me.	1	2	3	4	5
2. I feel challenged by my work.	1	2	3	4	5
3. I believe my work benefits society.	1	2	3	4	5
4. I am not content with my sexual life.	1	2	3	4	5
5. I am content with my romantic life.	1	2	3	4	5
6. I have gotten a lot of personal recognition in my community or at my job.	1	2	3	4	5
7. I am unhappy with my appearance.	1	2	3	4	5
8. My diet is not nutritionally sound.	1	2	3	4	5
9. I feel in control of my eating behavior.	1	2	3	4	5
10. Routinely, I engage in active exercise three or more times each week.	1	2	3	4	5
11. My mood is generally depressed.	1	2	3	4	5
12. I frequently experience anxiety.	1	2	3	4	5
13. Most things that happen to me are out of my control.	1	2	3	4	5
14. I am content with the frequency of my sexual interactions with a partner.	1	2	3	4	5
15. I currently experience physical discomfort or pain during sexual activity.	1	2	3	4	5
16. I believe I have no control over my physical health.	1	2	3	4	5
17. I am proud of my occupational accomplishments.	1	2	3	4	5
18. I consider my life stimulating.	1	2	3	4	5
19. I continue to set new personal goals for myself.	1	2	3	4	5
20. I expect that good things will happen in my life.	1	2	3	4	5
21. I feel physically well.	1	2	3	4	5
22. I feel physically fit.	1	2	3	4	5
23. I continue to set new professional goals for myself.	1	2	3	4	5

Editors' note: Permission is granted for this questionnaire to be utilized freely for clinical or research purposes. However, the editors request that acknowledgement be made in any publication using the UQOL.



Utian Quality of Life Scale (UQOL) Scoring Summary

Instructions: Each of the four subscales of the UQOL is represented by a unique color, as shown below. Sum the circled responses by color and enter the sum in the scoring summary section at the bottom of the page.

1. I am able to control things in my life that are important to me.	1	2	3	4	5
2. I feel challenged by my work.	1	2	3	4	5
3. I believe my work benefits society.	1	2	3	4	5
4. I am not content with my sexual life.	5	4	3	2	1
5. I am content with my romantic life.	1	2	3	4	5
6. I have gotten a lot of personal recognition in my community or at my job.	1	2	3	4	5
7. I am unhappy with my appearance.	5	4	3	2	1
8. My diet is not nutritionally sound.	5	4	3	2	1
9. I feel in control of my eating behavior.	1	2	3	4	5
10. Routinely, I engage in active exercise three or more times each week.	1	2	3	4	5
11. My mood is generally depressed.	5	4	3	2	1
12. I frequently experience anxiety.	5	4	3	2	1
13. Most things that happen to me are out of my control.	5	4	3	2	1
14. I am content with the frequency of my sexual interactions with a partner.	1	2	3	4	5
15. I currently experience physical discomfort or pain during sexual activity.	5	4	3	2	1
16. I believe I have no control over my physical health.	5	4	3	2	1
17. I am proud of my occupational accomplishments.	1	2	3	4	5
18. I consider my life stimulating.	1	2	3	4	5
19. I continue to set new personal goals for myself.	1	2	3	4	5
20. I expect that good things will happen in my life.	1	2	3	4	5
21. I feel physically well.	1	2	3	4	5
22. I feel physically fit.	1	2	3	4	5
23. I continue to set new professional goals for myself.	1	2	3	4	5

Scoring Summary

	Lower QoL		Mean	Higher QoL	
	-2SD	-1SD		+1SD	+2SD
Occupational QoL	13	19	25	31	35
Health QoL	11	16	21	26	31
Emotional QoL	12	16	20	24	28
Sexual QoL	0	4	8	12	15
Total QoL	48	61	74	87	100

Instructions: Means for each factor, along with standard deviations above and below the mean, are shown above. After summing each factor, mark with an “X” roughly where the patient’s score falls along each continuum. These marks will provide a graphic summary of the patient’s QOL score on each factor and for the scale as a whole.

