

Using patient’s voice to inform bolt-on development and use: a qualitative study of obese individuals who considered or underwent bariatric surgery

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BACKGROUND

- EQ-5D-5L might not have covered all health dimensions affected by obesity and bariatric surgery (BS).
- Objective:** To evaluate the adequacy of EQ-5D-5L as an HRQoL instrument for BS and to identify potential bolt-ons.

METHODS

- Participants:** Obese individuals who had received BS at least six months ago, individuals who were considering or had rejected BS were recruited from an outpatient weight management clinic in Singapore.
- In-depth interview was conducted with each participant using a semi-structured interview guide.
- Participants were asked to share about obese-related HRQoL and post-operative HRQoL (only BS patients) and to review the EQ-5D-5L descriptive system for its adequacy.
- All interviews were conducted in English, audio recorded, and transcribed verbatim.
- Transcripts were analyzed using an inductive thematic approach.

RESULTS

Table 1. Participant characteristics (N=25).

Characteristics	Mean ± SD / n (%)
Age (years)	37.9 ± 9.9
Sex: Female	13 (52%)
Ethnicity: Chinese	13 (52%)
BS decision status:	
Considering surgery	8 (32%)
Rejected surgery	7 (28%)
Received surgery	10 (40%)

RESULTS AND DISCUSSIONS

Table 2. Themes and subthemes generated from the analysis.

	Themes	Subthemes
(A) Obese-related HRQoL	1. Impaired physical functioning	1.1. Breathlessness, pain or discomfort 1.2. Mobility 1.3. Sleep, tiredness, and energy 1.4. Ability to perform usual activities
	2. Issues with appearance	2.1. Appearance 2.2. Insecurity about body 2.3. Clothing-related inconvenience
	3. Challenges with romantic relationship or physical intimacy	3.1. Establishing a romantic relationship 3.2. Physical intimacy 3.3. Self-doubt about sexual attractiveness
	4. Poor social well-being	4.1. Discrimination and humiliation 4.2. Social exclusion and awkwardness 4.3. Social avoidance
	5. Poor psychological and emotional well-being	5.1. Self-esteem or self-confidence 5.2. Feeling unworthy 5.3. Fear 5.4. Feeling sad or depressed
(B) Post-operative HRQoL	6. Improved physical functioning	6.1. Improved breathlessness and pain 6.2. Sleep, tiredness, and energy 6.3. Mobility 6.4. Ability to perform usual activities
	7. Change in appearance	7.1. Change in clothing 7.2. Appearance 7.3. Excess skin 7.4. Hair loss
	8. Change in relationship with food	8.1. Negative change 8.2. Positive change
	9. Improved social well-being	9.1. Social participation 9.2. Role functioning
	10. Improved psychological and mental well-being	10.1. Self-esteem and self-confidence 10.2. Feeling happy

- This study included 8 participants who were considering BS, 7 participants who rejected BS, and 10 participants who had received BS (Table 1).
- Participants with obesity reported impaired physical functioning, issues with appearance (more so among females than males), challenges with romantic relationship or physical intimacy, poor social well-being, fear (including burdening others), and poor psychological and emotional well-being (Table 2).
- While BS patients reported improvements in physical well-being, appearance, eating habits, social well-being, and psychological and emotional well-being, they also faced new challenges, such as loose skin and hair loss, which negatively affected their appearance and change in eating habits which affects food enjoyment and introduce inconvenience (Table 2).
- Based on the findings, we have identified 12 bolt-on candidates that may be used together with EQ-5D-5L to provide a more comprehensive measurement of the HRQoL of obese and BS recipients (Table 3).

Table 3. Potential bolt-ons for obese patients undergoing bariatric surgery.

1. Breathing problems (e.g. shortness of breath, wheezing, coughing, sputum)
2. Sleep
3. Tiredness
4. Physical appearance (e.g. overall appearance, body shape, skin, etc...)
5. Building or keeping intimate relationship (including sexual relationship)
6. Discrimination / Humiliation
7. Social activities (e.g. meeting, eating, or doing work with others)
8. Self-confidence
9. Burden to others
10. Diet control (e.g. control food portion and type of food)
11. Food enjoyment
12. Gastrointestinal problems (e.g. nausea, vomiting, heartburn, bloating, gases, diarrhoea, constipation)

CONCLUSION

- Although the five dimensions of EQ-5D-5L are relevant to patients with obesity or underwent bariatric surgery, this study also revealed the need to measure other health dimensions that are important to this population when assessing post-operative outcomes of bariatric surgery.