



# How respondents interpret the EQ-VAS? A qualitative study on respondent’s interpretation of the EQ-VAS in Ethiopia

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Belay YB<sup>1,2</sup>, Mihalopoulos C<sup>1</sup>, Mulhern B<sup>3</sup>, Engel L<sup>1</sup>

<sup>1</sup>Monash University Health Economics Group, School of Public Health and Preventive medicine , Monash University, Melbourne, VIC, Australia, <sup>2</sup>School of Pharmacy, Mekelle University, Mekelle, Ethiopia; <sup>3</sup>University of Technology Sydney, Sydney, NSW, Australia

## Objectives

- ❖ To explore how the general public and people with physical and/or mental health problems use and interpret the EQ-VAS in Ethiopia

## Methods

### Study setting and recruitment

- ❖ 15 individuals from the general public were recruited from public spaces such as parks and cafeterias;
- ❖ 15 participants with mental health issues (anxiety and/or depression); and
- ❖ 15 participants with prevalent cardiovascular diseases, including heart failure and/or hypertension, were recruited from Hospital settings

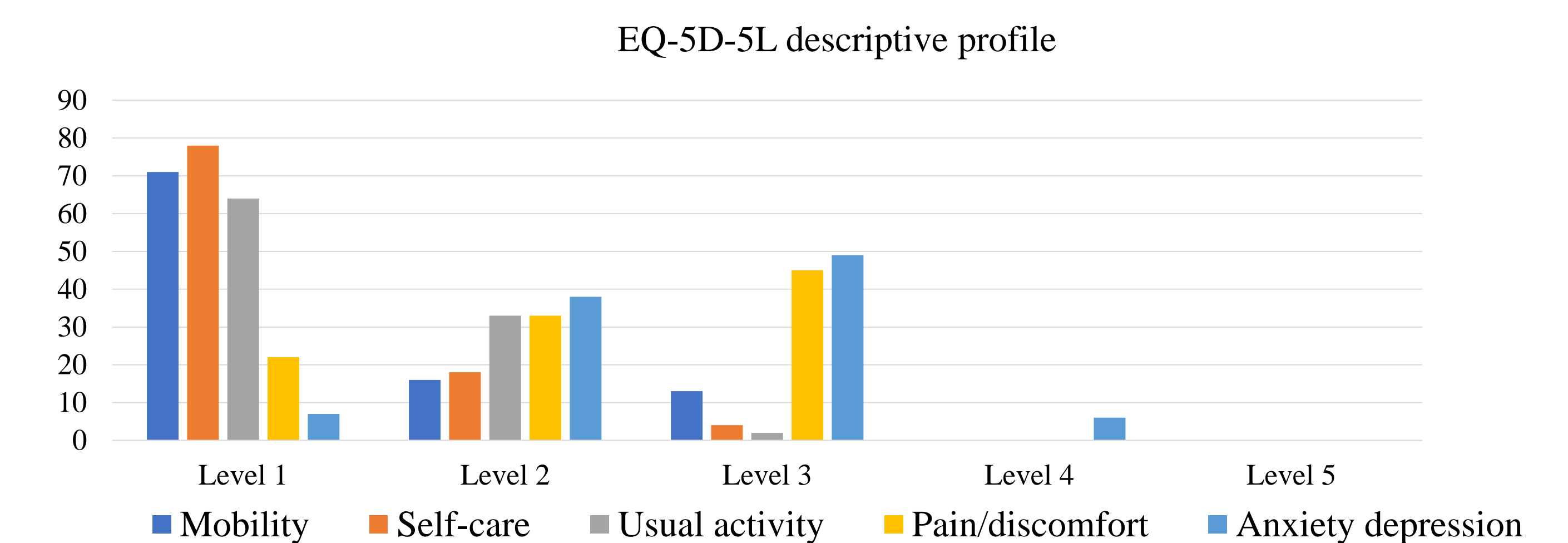
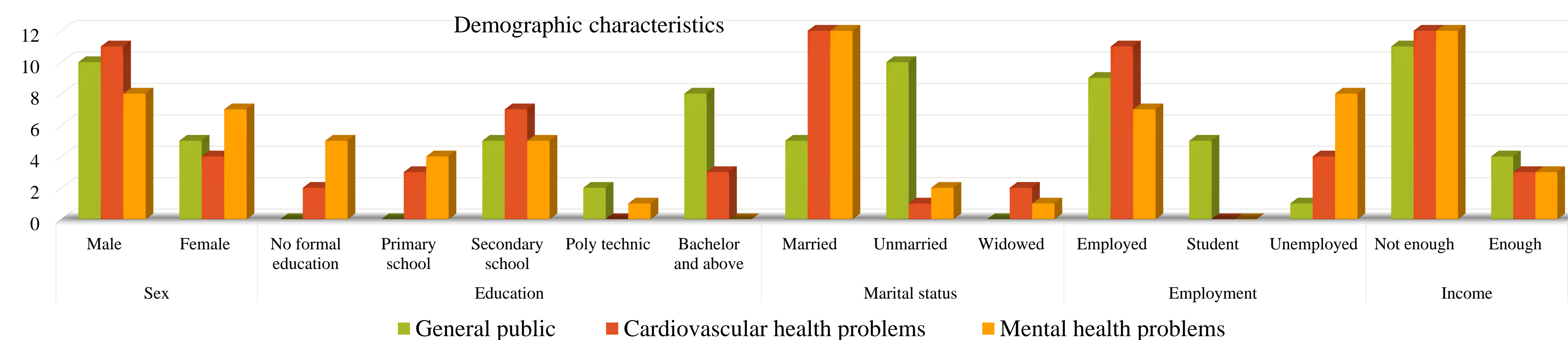
### Data collection

- Survey content: EQ-5D-5L /EQ-VAS /socio-demographic data
- Following the survey, respondents reflected on their EQ-VAS responses and qualitative interviews were guided by a topic guide
- The guide covered topics such as ease of EQ-VAS completion, criteria for responses, perception of VAS accuracy, considerations in completing the EQ-VAS, correlation of health with EQ-VAS score, interpretation of best imaginable health state, personal experiences with best health, placement of 'best health' on EQ-VAS, interpretation of worst imaginable health state, personal experiences with worst health, and placement of 'worst health' on EQ-VAS

### Analysis

- The interview was conducted in Amharic and were transcribed in Amharic and the transcripts were then uploaded to NVIVO software
- One of the investigators (Mr. Belay) native speaker of Amharic coded the data and codes were summarised.
- After coding the data, content analyses were conducted separately for each of the three participant groups.
- The findings from each of the three participant groups were then compared using cross-case analysis

## Results



### Completing EQ-VAS

- Majority of respondents from the general public find completing EQ-VAS difficult (8) or not easy (5)
- Participants from the general public (5) found completing EQ-VAS straightforward
- Half (7) of respondents with cardiovascular disease conditions and the majority of participants (9) with mental health conditions stated that completing EQ-VAS is straightforward

### Interpretation of health

- Respondents considered various factors beyond current or prior health conditions, including social interactions, medication use, and personal experiences

### Best/worst imaginable health states

- Respondents considered a range of factors including social and economic status, mental and emotional health, and family stability when interpreting the best/worst imaginable health state
- For the general public, the best health state involved being disease-free, financially stable and having a healthy family
- People with physical and mental health problems often interpreted the best health state as having a stable income, capability to work, or a happier, pain- or disease-free life
- The worst imaginable health state for the general public include severe illness or mental health problems
- People with cardiovascular issues frequently interpreted worst health state as being bedridden, while individuals with mental health problems saw it as being unconscious
- Some participants considered achieving the best health state as unattainable

### Representation of a meaningful change on the 0-100 scale

- A portion of general public respondents (5) are comfortable with the current hash-marks of the scale, while others (3) recommended changes to the scale, suggesting increments of 5, 10
- The majority of general public respondents (8) found a 5- to 10-point scale more meaningful for assessing changes in health status, citing examples such as a cold resulting in a 10-point reduction in score.
- Respondents from various health backgrounds considered a change of 5 or 10 on the scale as significant, with some correlating score changes with successful treatments
- Participants often used their past health as a benchmark for determining their current score, with some considering 100 as an unimaginable health state even though quantifying health in numbers was challenging for them

## Discussion

- Respondents stressed the need for explanations regarding the numbers, a similar suggestion was given by respondents from a previous study that assessed the interpretation of EQ VAS by Asian populations (Tan et al., 2021).
- Respondents stressed the need for clearer instructions, including examples of score ranges indicating health state transitions. This could be challenging given the scale's existing detailed instructions. Further exploration is needed to refine instructions indicating severity with change scores beyond the best/worst references.
- Respondents highlighted challenges in understanding numerical changes' relation to health status shifts and noted limitations in instructions for considering personal factors like financial issues when assessing "today's health."
- Participants, irrespective of their health conditions, recommended explanations for numbers. Many also suggested changes to the hash-marks

## Conclusions

- study provided further evidence related to the interpretation of the EQ-VAS and underscores the necessity for explanations of numbers and change in hash-marks. Further quantitative research is needed to examine what denotes a meaningful change on EQ-VAS across different disease areas

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### Correspondence to:

Yared Belete Belay, PhD student, Monash University Health Economics Group (MUHEG), Monash University, Australia  
Email: [yared.belay1@monash.edu](mailto:yared.belay1@monash.edu)

