

# Gaps in Interactive-Critical Health Literacy among Men and Women in Lima, Peru

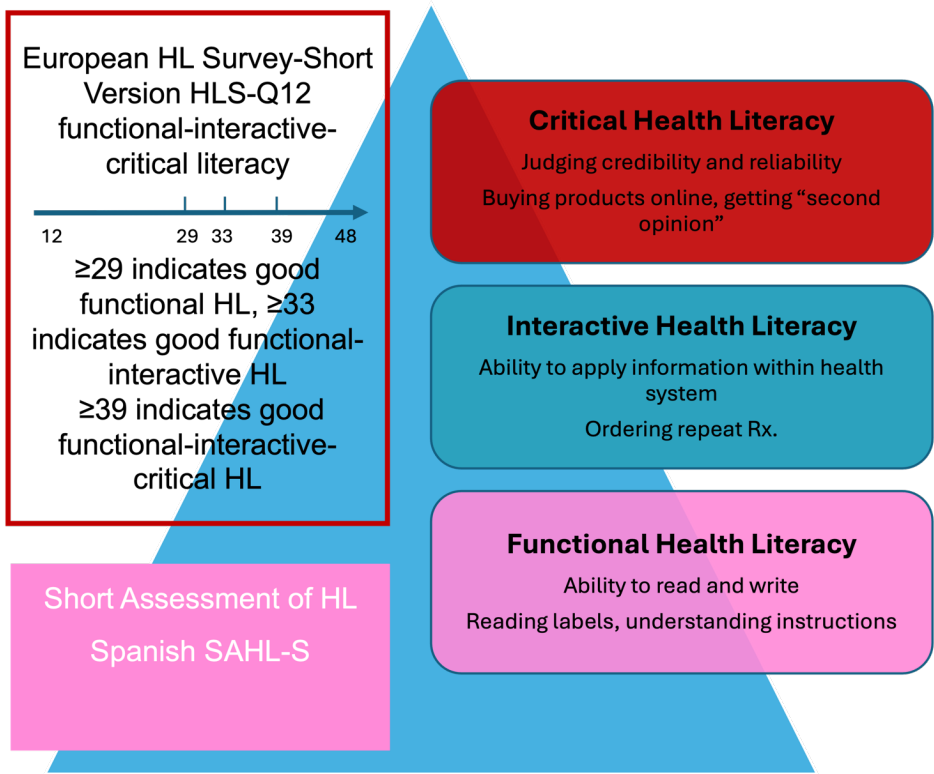
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## Background

Health literacy (HL) can empower and motivate individuals to gain access to, understand, and use information to promote and maintain good health. HL comprises three different, yet interrelated, skills: 1) Functional literacy—basic reading and writing skills; 2) Interactive literacy—ability to derive meaning from different forms of communication and apply new information to changing situations; and 3) Critical literacy—ability to critically analyze information and achieve advanced health decisions. Limited studies have evaluated HL among the general population in Latin America.



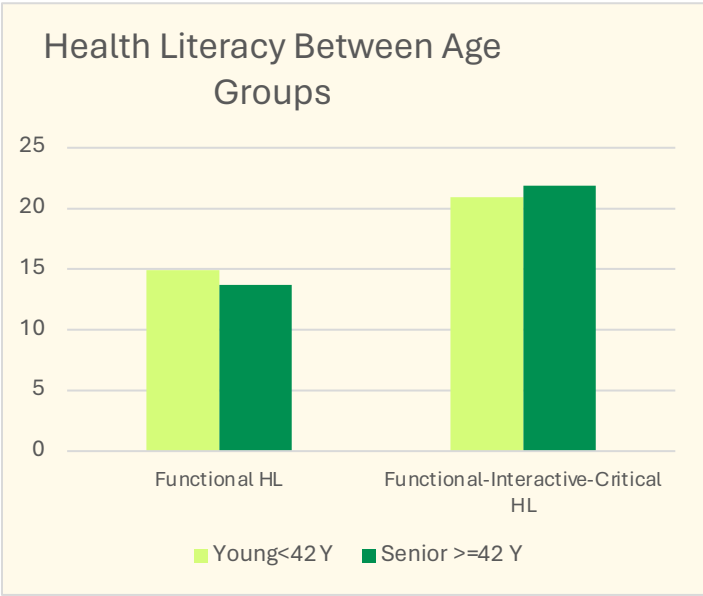
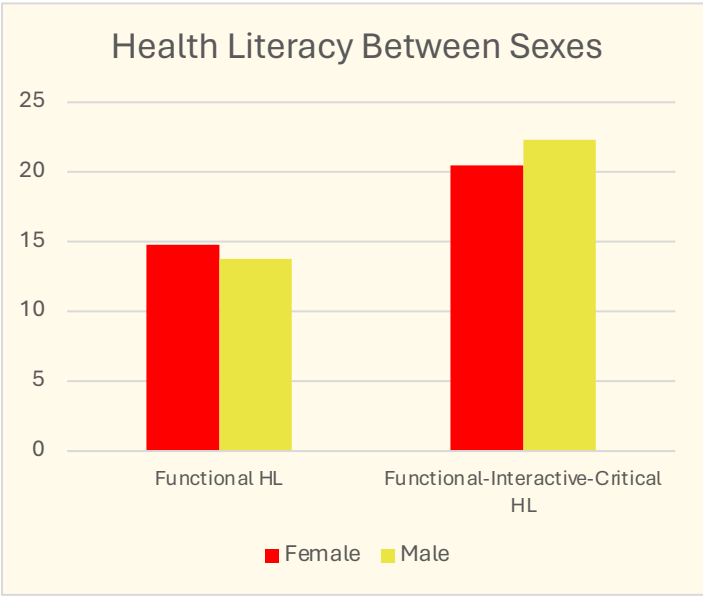
**Figure 1. Levels of Health Literacy and Corresponding Measurement Approaches**

## Methodology

- We conducted a cross-sectional study to measure functional, interactive and critical HL skills among adults in Lima, Peru.
- In June 2024, participants were recruited from four shopping malls and metro stations in high-and low-income districts. Eligibility criteria: age  $\geq 18$  years, residence in Lima, Peruvian nationality, and capacity to provide informed consent.
- The survey included the Short Assessment of HL-Spanish SAHL-S (measuring functional literacy; range 0 to 18,  $\leq 14$  indicates inadequate HL), the European HL Survey-Short Version HLS- Q12 (measuring functional-interactive-critical literacy; range from 12 to 48;  $\geq 29$  indicates good functional HL,  $\geq 33$  indicates good functional-interactive HL,  $\geq 39$  indicates good functional-interactive-critical HL).
- $\chi^2$  and t-test were used for subgroup comparisons of categorical and continuous variables, respectively.

## Results

- Among 250 adults enrolled, mean age was  $42 \pm 14$  years and 132 (52.8%) were female. 103 (41.2%) attended university or above, with no difference by sex ( $p=0.38$ ).
- Overall, mean functional HL (reading and writing skills) was high ( $14.3 \pm 4.5$ ). However, the mean functional-interactive-critical HL of HLS-Q12 was low ( $21.4 \pm 6.8$ ).



- When stratified by sex, women had lower HLS-Q12 scores (20.5 vs 22.3,  $p<0.001$ ), despite higher SAHL-S scores (14.8 vs 13.8,  $p=0.001$ ).
- When stratified by age ( $\geq 42$  vs  $<42$  years), younger adults scored lower than older adults in the HLS-Q12 (20.9 vs 21.9,  $p<0.001$ ), despite higher SAHL-S scores among young people (14.9 vs 13.7,  $p<0.001$ ).

**Figure 2. (A)Health Literacy Between Sexes (B) Health Literacy Between Age Groups**

## Interpretation

Women and younger adults in our study demonstrated higher levels of functional HL, however these skills did not translate to adequate functional-interactive-critical HL, suggesting gaps in ability to access, understand and apply health information relevant to stay healthy. These findings will help inform targeted interventions to strengthen HL across the continuum for this population.

### References:

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