

Adapted Targeted Literature Review (aTLR) methods for robust quantitative survey instrument development: The aGAP (Abbott Global Assessment of Patients unmet needs) multinational survey study in Chronic Liver Disease (CLD)

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Background

- Chronic liver disease (CLD) affects over 1.5 billion people globally and is associated with a high symptom burden, particularly fatigue, a symptom that is both a physiological and socio-behavioral challenge^{1,2}.
- CLD research primarily focuses on treatment development and disease progression, but there is growing interest in CLD symptomatology, particularly its impact on health-related quality of life (HRQoL)³.
- An ongoing observational, multinational, direct-to-patient, cross-sectional survey study, aims to describe CLD symptoms, severity, and burden, specifically probing for fatigue occurrence and impact. To inform the construction of the survey instrument, aTLR methods were utilized (Figure 1).



Objective

- Robust quantitative survey instrument (questionnaire) development is challenging and merits careful design for credible data capture and selecting valid outcome assessment measures. To do so, we conducted an aTLR applying adapted rapid review and qualitative evidence synthesis methods⁶.

Methods

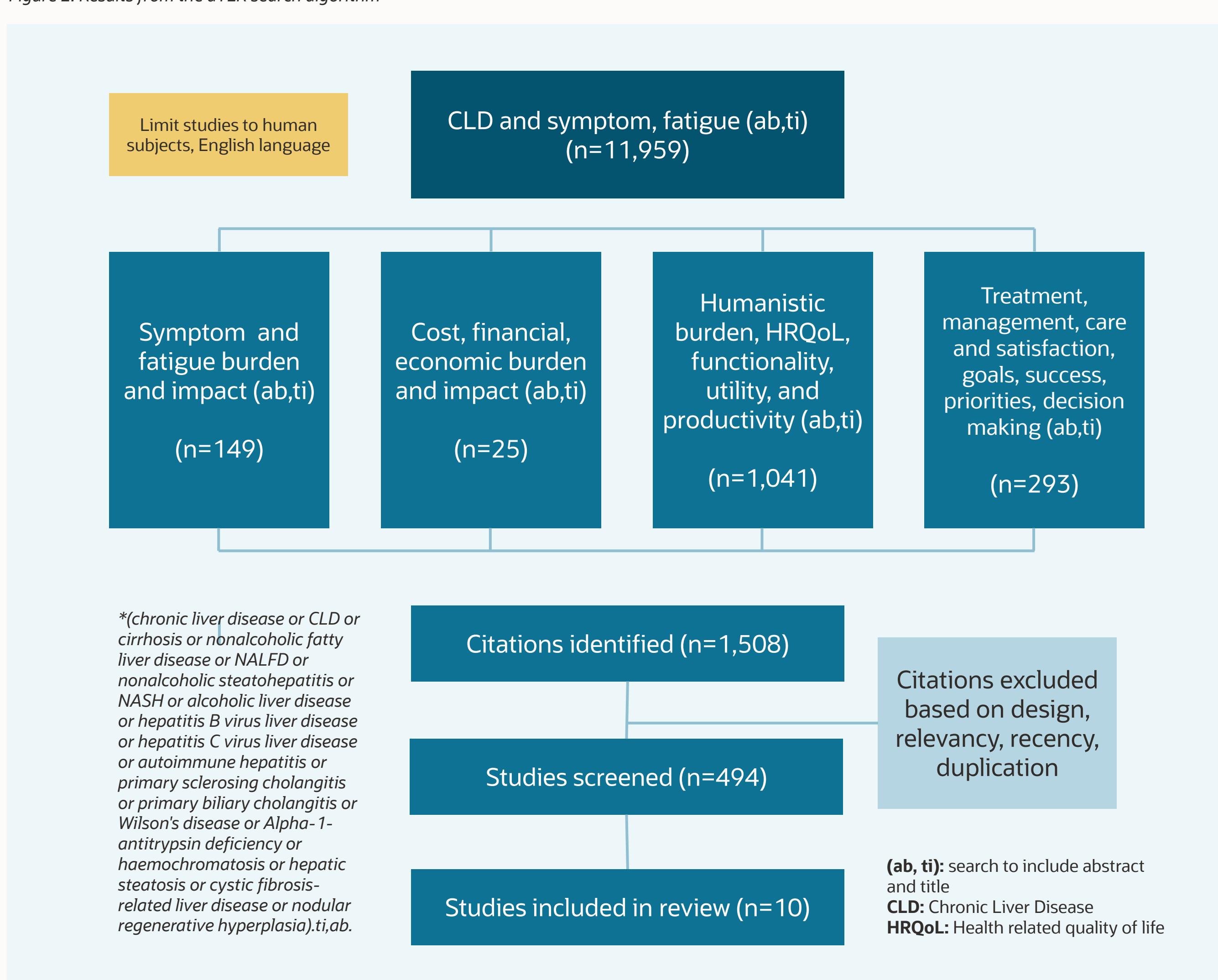
- A high-specificity search was conducted in MEDLINE, focusing on medical subject headings (MeSH) terms and free-text keywords relevant to CLD and fatigue.
- Seed publications by experts were purposively included to ensure quality.
- The first 100 citations were screened by recency, and 10 abstracts were retrieved for full-text review.
- Study characteristics were extracted, and thematic analysis was used to identify codes, which were synthesized into broader themes forming a thematic framework.

Results

494 citations were identified, and 10 studies were included (7 from MEDLINE, 3 from expert recommendations) (Figure 2).

- Study types included: 4 qualitative, 1 quantitative, 2 mixed methods, 2 expert commentaries, 1 qualitative interview.
- Median publication year: 2020 (range: 2017–2023)

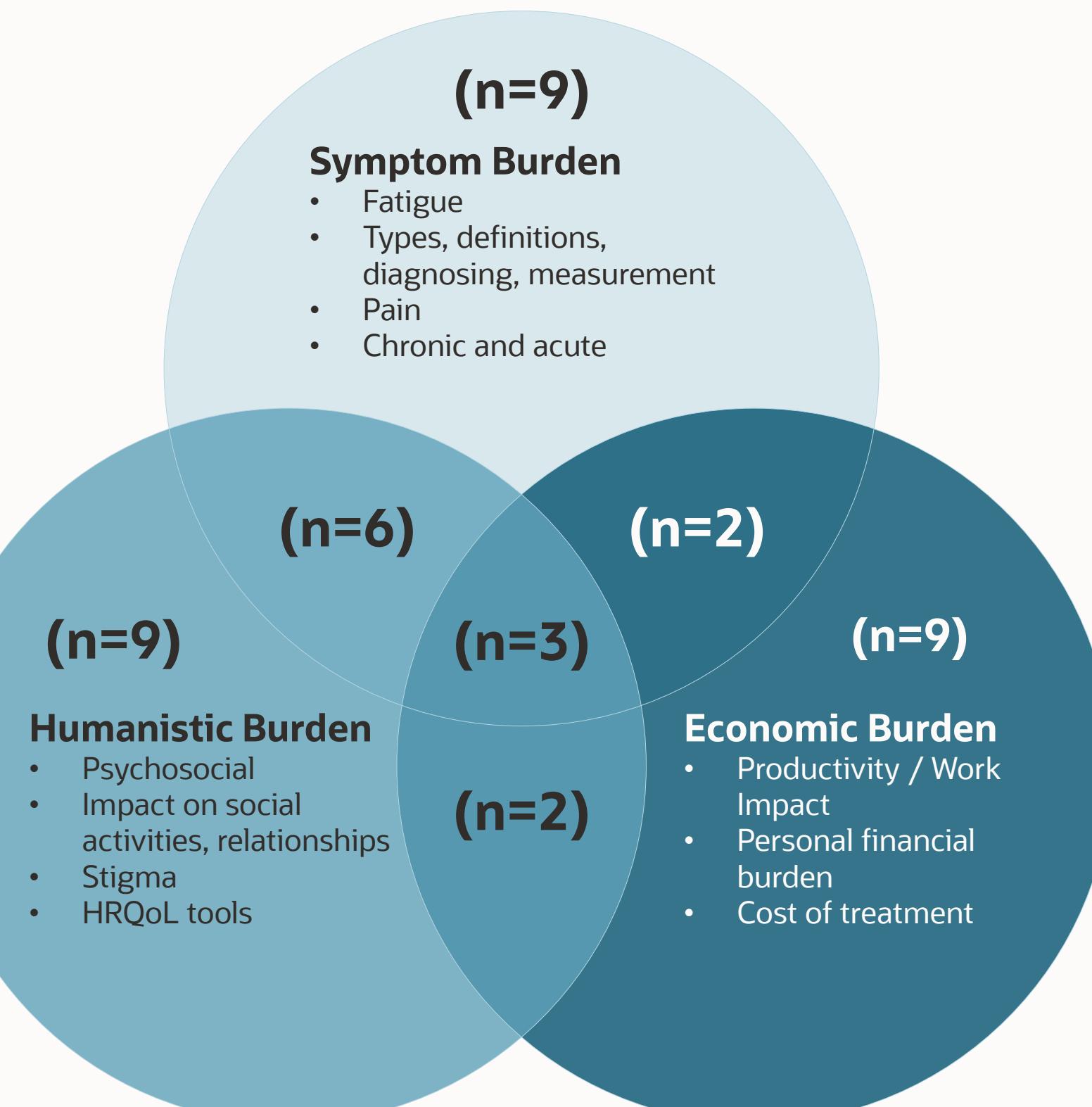
Figure 2: Results from the aTLR search algorithm



- CLD symptomatology domains were described:
 - Fatigue was highlighted as a major symptom driving health-seeking behaviors.
- Humanistic burdens spanned personal, social, professional, and psychological domains.
- Indirect and direct financial hardships were described.
- Validated measures for fatigue and CLD symptomatology were identified.
- Key areas of interest identified through the aTLR were synthesized into a robust survey questionnaire framework (Figure 3).

Figure 3: Extracted themes in relation to primary objectives from studies included after running search algorithm

Thematic Analysis of Included Studies (n=10) Primary Objectives



Conclusion

aTLR methods rapidly optimized quantitative questionnaire development. Symptomatology, humanistic and economic burdens, and management of CLD, were identified and synthesized to for robust data collection.

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