

Use of and patient satisfaction with virtual care among adult patients and caregivers of pediatric patients facing language barriers: a systematic review and meta-analysis

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BACKGROUND

- Virtual care use dramatically increased during the COVID-19 pandemic.
- Virtual care may not be equitable for families facing language barriers.
- Studies in this area have not been synthesized.

OBJECTIVES

To synthesize the literature on:

- 1) use of**

and

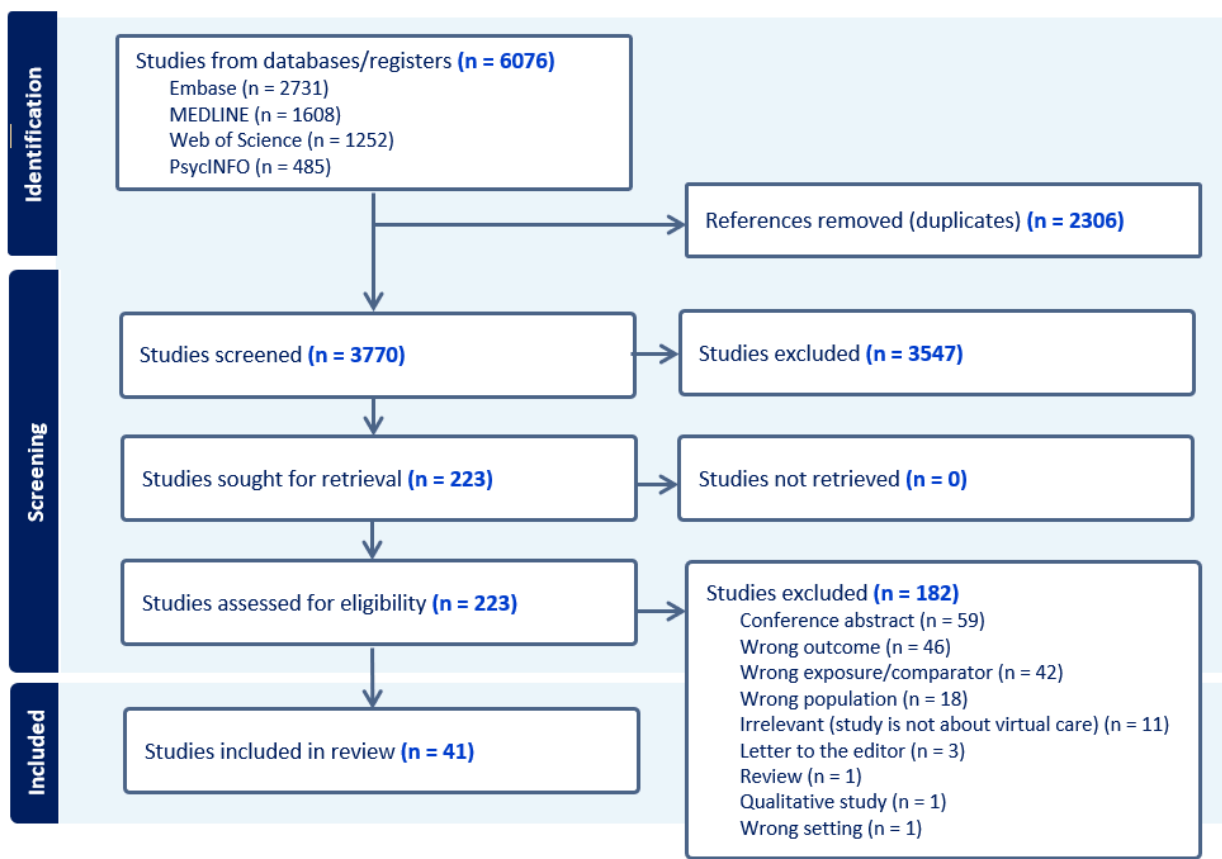
- 2) patient satisfaction** with virtual care among adult patients and caregivers of pediatric patients in high-income countries by presence of language barriers.

METHODS

- 4 databases were searched from inception to March 10, 2023 using language and virtual care terms.
- Eligible studies reported quantitative data on use of and/or patient satisfaction with virtual care in adult patients or caregivers of pediatric patients by presence of language barriers.
- Results were synthesized narratively and with random-effects meta-analyses.

RESULTS

Search Results



Patient Satisfaction with Virtual Care

- 3 studies reported on patient satisfaction among caregivers of pediatric patients (n=3744), and 3 studies reported on patient satisfaction among adult patients (n=675).
- Among caregivers, **2 studies reported evidence of reduced satisfaction with video virtual care among caregivers facing language barriers.** Caregivers facing language barriers were significantly less satisfied with pediatric orthopedic video visits overall, and in individual items notably less satisfied with overall time spent with surgeon and with explanation provided by surgeon, and were more likely to prefer in-person over video telehealth for a broad range of pediatric conditions. The 3rd study found no difference in satisfaction with video and telephone pediatric surgical subspecialty care by presence of language barriers.
- Among adults, **1 study found patients facing language barriers were significantly less satisfied with their virtual rheumatology visit.** The other studies found no differences in satisfaction with prenatal and otolaryngology virtual care by presence of language barriers.

- After deduplication, the search retrieved 3770 results.
- 41 studies were included, including 35 studies reporting on use of virtual care and 6 studies reporting on satisfaction with virtual care

Use of Virtual Care

- 5 studies reported on virtual primary care use, all among adult patients:
- Meta-analysis showed lower odds of virtual care use versus non-use (Fig 1) and of video versus telephone visit use (Fig 2) among patients facing language barriers but did not reach statistical significance.
- Results of studies (n=2) on non-completion/non-attendance of scheduled virtual primary care visit were mixed; one study found higher odds of virtual visit non-attendance in individuals with a preferred language other than Spanish.
- Meta-analysis of studies on specialist virtual care use (n=30), including 4 studies of caregivers, is underway.

Fig 1: Random effects meta-analysis of included studies (n=2) that reported adjusted odds ratios of use of virtual care versus non-use of virtual care in individuals with versus without language barriers

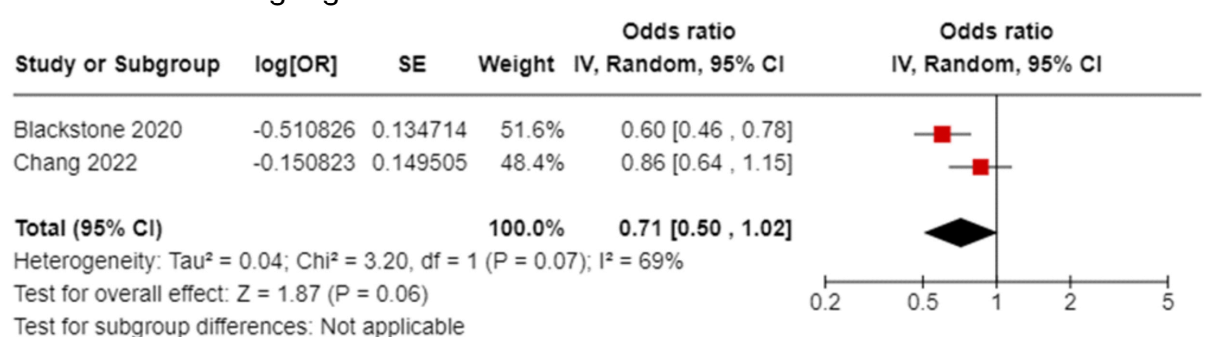
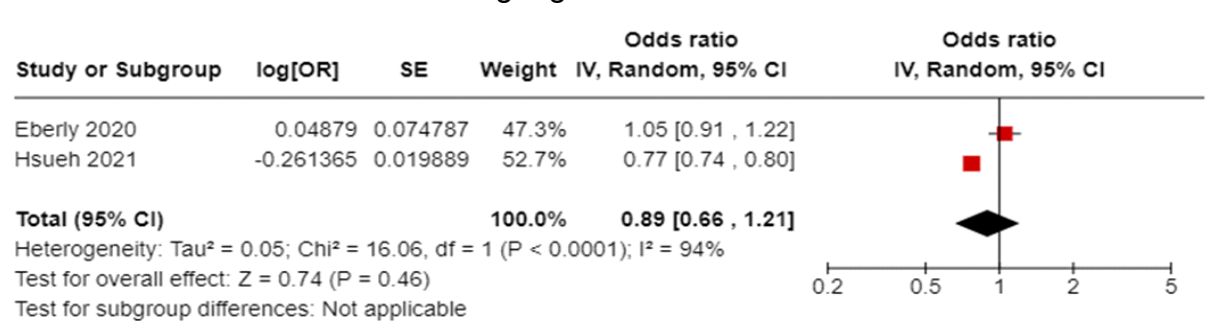


Fig 2: Random effects meta-analysis of included studies (n=2) that reported adjusted odds ratios of video visit use versus telephone visit use for virtual primary care in individuals with versus without language barriers



CONCLUSIONS

- Virtual primary care use may be lower among adults facing language barriers.
- Satisfaction with virtual pediatric care may be lower among caregivers facing language barriers, specifically for video-based virtual care.
- Synthesis of studies on virtual specialist care use will add clarity to the relationship between language barriers and virtual care use.