Model of Disability Healthcare Disparities

M. Morris PhD, A. Wong MD, and M. Jan MD Candidate
Department of Family Medicine, University of Colorado, Denver, CO

Introduction

Approximately one in four adults (25.7%) in the United States, or 61 million people, lives with at least one disability.[1]
Patients with disabilities are:

- Twice as likely to find health care providers' skills and facilities inadequate[2]
- Three times as likely to be denied healthcare[2]
- Four times more likely to be treated poorly in the healthcare system [2]

Hypothesis/Objective

Hypothesis: That cumulative knowledge will reveal that patients with disabilities will experience poorer outcomes in the United States healthcare system, attributable to multifactorial reasons at the patient, provider-and-staff, and healthcare organization levels

Objective: To create a model of disability healthcare disparities based on the Killbourne model of healthcare disparities as described in the 2006 research article "Advancing Health Disparities Research within the Health Care System: A Conceptual Framework"[3]

Methods

Study design and duration:

- Scoping review from September 2019 through April 2020 of PubMed articles
- Two passes
- Categorized into "Detecting," "Understanding," and "Reducing" categories as per Kilbourne model

Inclusion:

- Goal: to observe impact of 1990 ADA
- Research articles published from Jan 1990 – December 2019
- Address healthcare outcomes of adults with long-term disabilities
- U.S. subjects

Exclusion:

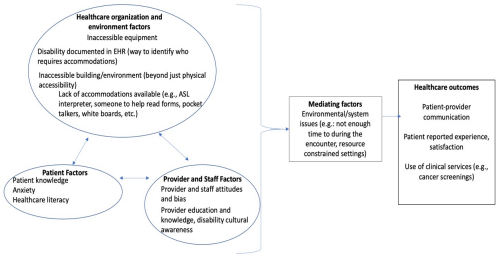
- Publications not pertaining to U.S. subjects
- Not directly related to access, delivery, or quality of healthcare services
- Pertaining to short-term/limited disability
- Addressing health (and not healthcare) or insurance outcomes only
- Pediatric populations
- Dental care
- Care transition/rehab services
- Commentaries, editorials, systematic reviews

Sample size: 190 articles with 80% rater consensus

Status: Review completed of 80 of the 190 articles

Results

Attitudes and biases from providers about patients with disabilities included being seen as "time-consuming," "lacking competence," "too complicated," or "asexual"
Inaccessible building/environment barriers included transportation issues, architectural inaccessibility, and sensory-related issues
Inaccessible equipment issues included lack of of height-adjustable examination tables and wheelchair-accessible scales
Provider education gaps involved understanding of ADA legal responsibilities, cultural sensitivity, communication methods, anesthesia for patients with disabilities, care for women with disabilities (at all stages including gynecological, pregnancy, labor, and delivery), autism, and spinal cord injuries
Patient-provider communication issues were reported among patients with autism spectrum disorder, those who are deaf and hard of hearing, those with speech difficulties, and patients with intellectual disability
Patient factors included behavioral challenges, patient skepticism and pessimism about the healthcare system rooted in past traumatic experiences, complicated emotions around healthcare, lack of patient education, and medical complexity
Lack of accommodations were seen with lack of American Sign Language interpreters, lack of Braille or larger-font materials, lack of accommodations for sensory challenges



Conclusions

Findings:

- Healthcare organization and environment, patient-related factors, provider and staff dynamics, and mediating factors contributing to poorer healthcare outcomes for patients with disabilities
- Notably, "provider understanding, and disability awareness" (present in 46.25% of articles) and "attitudes and bias – providers and staff" (present in 43.75% of articles) were most prevalent factors in preliminary review of 80 articles

Directions for future research:

- Complete review of full 190 articles compiled in scoping
- Establishing a time frame to pilot test model
- Continue adaptation/refinement of model to newer studies

Strengths and limitations:

- Killbourne model chooses to exclude systemic and societal factors, preferring to focus primarily on issues contained within the healthcare system itself
- Systemic factors were moreso contained within "mediating factors" in model, but were not more fully elaborated on

References

1. Centers for Disease Control and Prevention. (2021, October 27). *Prevalence of disability and disability types*. Centers for Disease Control and Prevention. https://www.cdc.gov/ncbddd/disabilityandhealth/features/disability-prevalence-rural-urban
2. Krahn, Gloria L., et al. "Persons with disabilities as an unrecognized health disparity population." *American Journal of Public Health*, vol. 105, no. S2, 17 Feb. 2015, https://doi.org/10.2105/ajph.2014.302182.
3. Kilbourne, Amy M et al. "Advancing health disparities research within the health care system: a conceptual framework." *American journal of public health* vol. 96,12 (2006): 2113-21. doi:10.2105/AJPH.2005.077628

Disclosures

The authors have no conflicts of interest or financial interest to declare.

Acknowledgements

This research and paper would not have been possible without the contributions of my supervisors, Dr. Alicia Wong, MD, and Dr. Megan Morris, PhD.