

Introduction

- Health disparities are well-documented in otolaryngology literature.
- Existing studies' solutions propose **cultural competency**:
 - An individual provider's ability to understand the healthcare experiences of various marginalized populations.¹
- Cultural competency can inadvertently reinforce stereotypes of marginalized populations.
- Overreliance on cultural competency can fail to address systemic issues that contribute to inequity.²
- Interventions that primarily target individual characteristics and behaviors may widen existing inequity.³
- The National Institute on Minority Health and Health Disparities (NIMHD) Research Framework classifies health disparities by "domain" of origin and "level" of influence⁴ with the goal of fostering **structural competency**.
- Contextualizing disparities within broader societal structures can provide solutions beyond individual cultural competency.

Objectives

- Examine published literature on healthcare disparities in adult otolaryngology through the NIMHD research framework.
- Identify proposed solutions related to **structural competency**.

Methods and Materials

- Literature review was conducted using PubMed, Web of Science, and Embase databases.
- Articles addressing specific health disparities in otolaryngology in the United States were identified.
- Head and neck cancer, pediatric, and otology-related articles were excluded.
- The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines were followed (Figure 1).
- Each article was mapped by level and domain according to the NIMHD framework (Figure 2)
- Descriptive and qualitative analysis were also conducted.

Figure 2. NIMHD Framework.⁴

		Levels of Influence*			
		Individual	Interpersonal	Community	Societal
Domains of Influence (Over the Lifecourse)	Biological	Biological Vulnerability and Mechanisms	Caregiver-Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient-Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes		Individual Health	Family/ Organizational Health	Community Health	Population Health

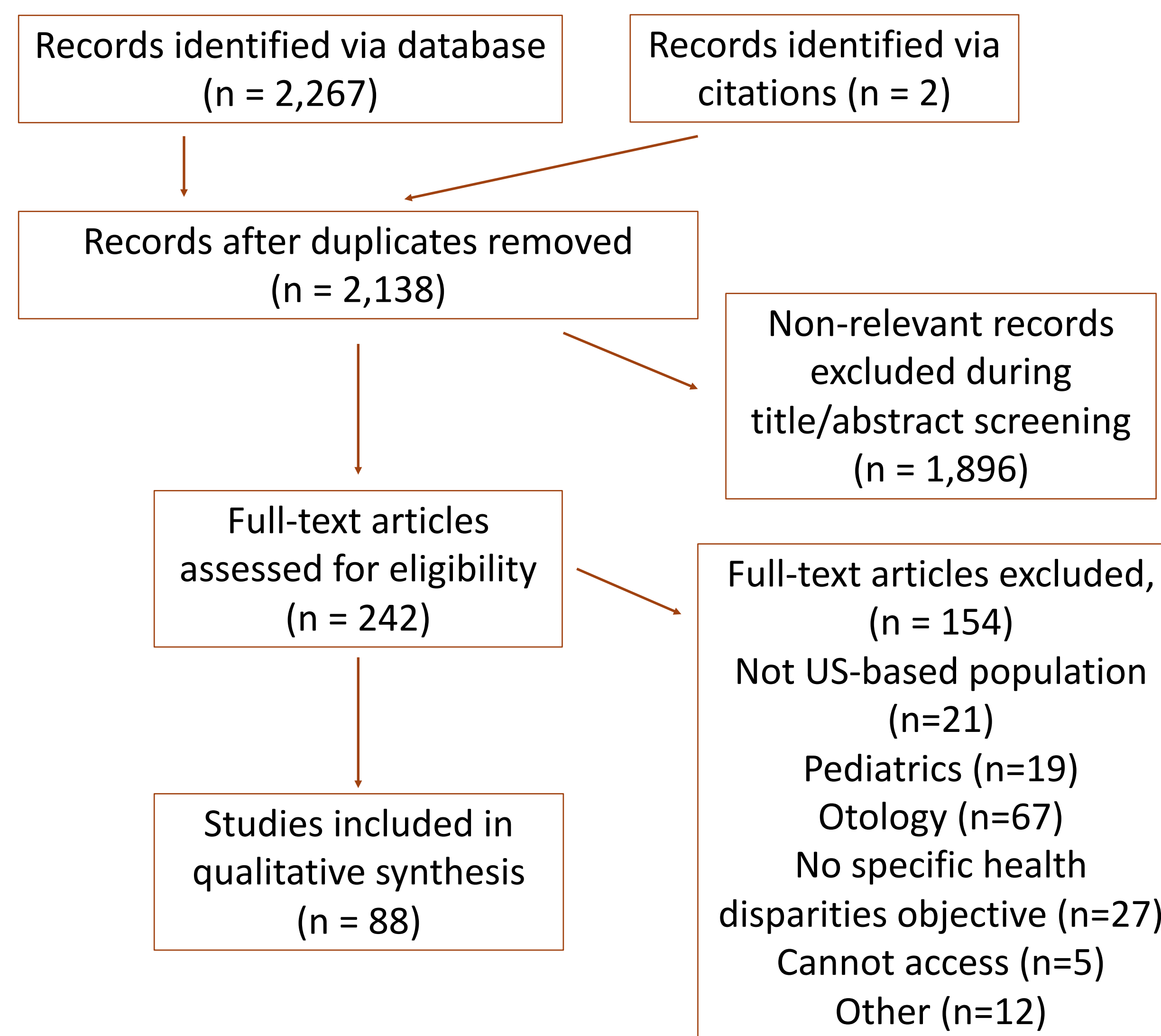


Figure 1. PRISMA flow chart.

Results

- In total, 88 articles met criteria for review.*
- Commonly studied health disparities were:
 - race/ethnicity (84%)
 - socioeconomic status (80%)
 - sex/gender (71%)
- 92% of studies made some type of recommendation.
- Most called for further study or increased awareness of the issue (Chart 1).
- Actionable interventions were proposed by 28% of studies.
- No study discussed structural competency or used a health disparities framework.
- A majority (94%) of studies addressed individual-level disparities in the sociocultural domain when mapped to the NIMHD framework (Table 1).
- 6% of manuscripts studied societal-level disparities in any domain.

Table 1. Included studies mapped to NIMHD research framework.

		Levels of Influence			
		Individual	Interpersonal	Community	Societal
n = 89					
Domains of Influence	Biological	3	0	0	2
	Behavioral	22	0	0	0
	Physical/Built Environment	3	6	4	0
	Sociocultural Environment	80	2	2	0
	Healthcare System	52	7	20	3
Health Outcomes		Individual Health	Family/ Organizational Health	Community Health	Population Health

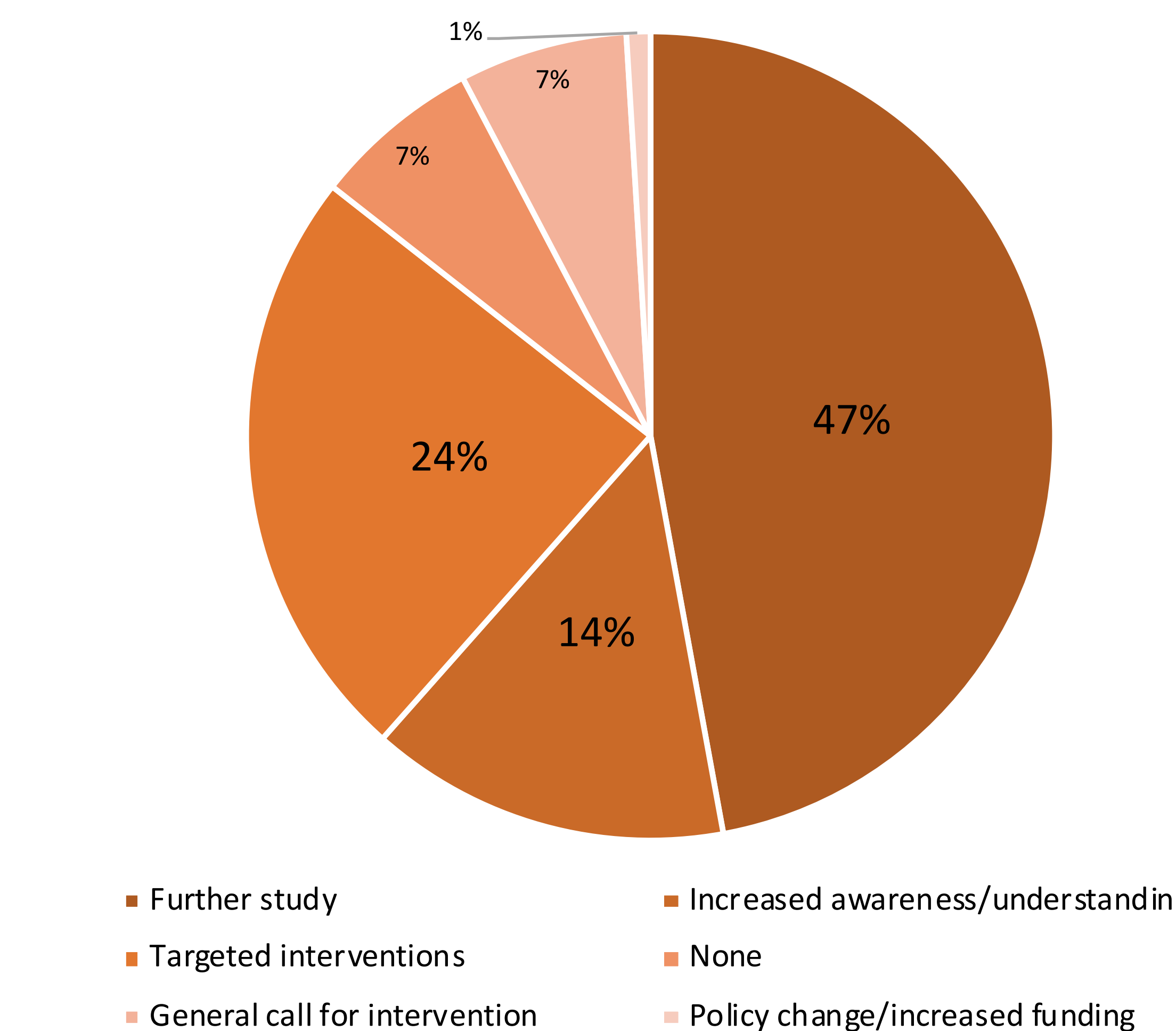


Chart 1. Characterization of recommendations made by included studies.

Discussion

- Most research focuses on disparities at the individual level, such as patient race, income, or insurance status.
- This overinflates cultural competency, rather than **structural competency**, in combating health disparities.
- Research based on societal-level, rather than individual-level determinants of health may create multi-domain solutions for health disparities.
- Public health research frameworks are helpful to contextualize disparities and solutions.
- Actionable recommendations are necessary to begin combating disparate health outcomes caused by inequity.
- Interventions demonstrated by included studies to successfully bridge disparate health outcomes included:
 - screening for financial insecurity
 - use of social workers
 - language interpreter services

Conclusions

- Health disparities literature in otolaryngology encompasses a wide variety of descriptive data.
- Its predominant focus is on individual determinants of health such as race/ethnicity, gender, or socioeconomic status.
- Structural competency** is necessary to address disparities.
- Actionable interventions are only present in a minority of studies examining health disparities.
- Future research should consider higher levels of health disparities to better guide possible interventions.
- The use of public health research frameworks may help achieve this goal in the path to combating health inequity.

*Full list of included studies available upon request

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References

- Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. *Soc Sci Med.* 2014;103:126-133.
- Downey MM, Gomez AM. Structural Competency and Reproductive Health. *AMA J Ethics.* Mar 1 2018;20(3):211-223. doi:10.1001/journalofethics.2018.20.3.peer1-1803
- Kumanyika SK. A Framework for Increasing Equity Impact in Obesity Prevention. *Am J Public Health.* 2019;109(10):1350-1357.
- Alvidrez J, Castille D, Laude-Sharp M, Rosario A, Tabor D. The National Institute on Minority Health and Health Disparities Research Framework. *Am J Public Health.* 2019;109(51):S16-S20.