Addressing racial/ethnic disparities in the occurrence of late-stage gastric cancer (2009-2019)

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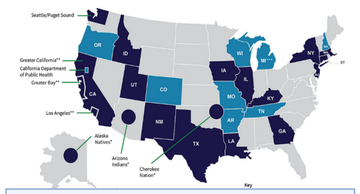
BACKGROUND

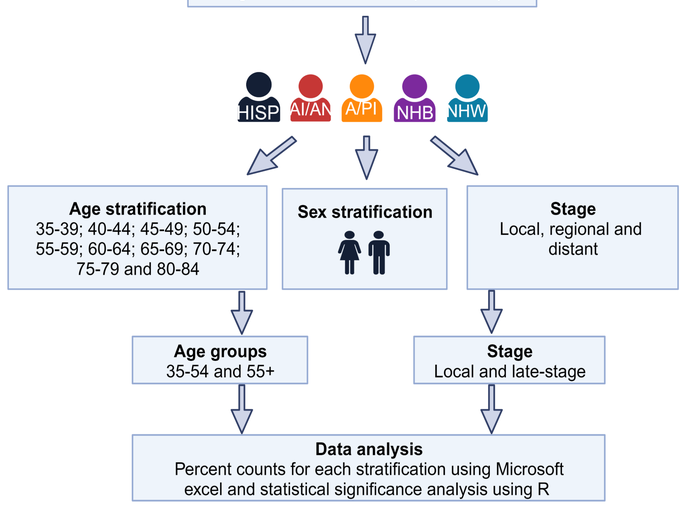
- Gastric cancer (GC) is the 5th most common cancer in the world[1]
- 5-year survival is 6% for distant GC
- Staging:
  - Late-stage: sum of regional and distant gastric cancer cases (metastasis beyond the stomach)
- In the U.S, GC accounts for 1.5% of all cancers annually
- Population level trends overshadow existing disparities in certain race/ethnicities
  - American Indian/Alaska Natives[1]
  - Young Hispanic males[2,3]

Do the proportions of late-stage gastric cancer differ across Non-Hispanic Whites (NHW), Non-Hispanic Black (NHB), American Indian/Alaska Native (AI/AN), Asian/Pacific Islander (A/PI) & Hispanic populations?

METHODS



SEER Research Limited-Field Data, 22 Registries, Nov 2021 Sub (2000-2019)[4]



RESULTS

Key Takeaways

1. **Hispanics have significantly higher proportions of late-stage gastric cancer diagnosis than NHWs**
2. **Age and sex stratifications highlight underlying disparities in late-stage GC occurrence across races/ethnicities**

Table 1: Late-stage gastric cancer counts per race/ethnicity and stratification

	A/PI (n=7,672)	AI/AN (n=316)	Hispanic (n=15,166)	NHB (n=9,723)	NHW (n=35,914)
Sex [(n,%**)]					
Male	4,615(67)	205(74)	9,071(75)	6,064(70)	25,329(70)
Female	3,057(64)	111(58)	6,095(66)	3,659(59)	10,585(59)
Age [(n,%**)]					
35-54	1,622(72)	96(78)	4,851(76)	2,036(67)	5,381(69)
55+	6,050(64)	220(64)	10,315(69)	7,687(66)	30,533(66)

Source: Surveillance, Epidemiology, and End Results (SEER) 22 registries, Nov 2021 sub (2000-2019)[4]
** Percentage calculated: # of late-stage GC/ total GC cases

Fig 1A: Proportion of late-stage GC across 35-54 years old by race/ethnicity

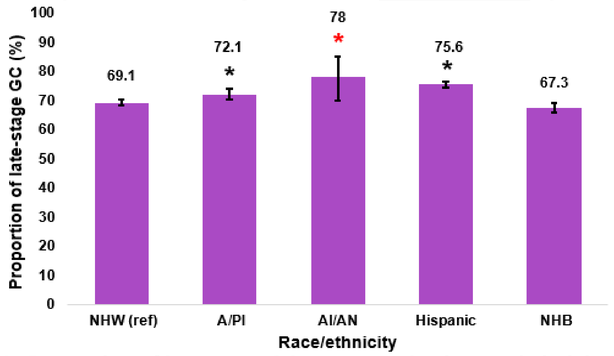
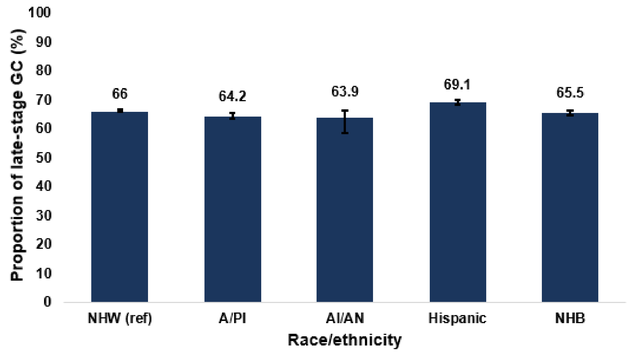


Fig 1B: Proportion of late-stage GC across 55+ years old by race/ethnicity



Statistical significance should not outweigh public health relevance

Fig 2A: Proportion of late-stage GC across males by race/ethnicity

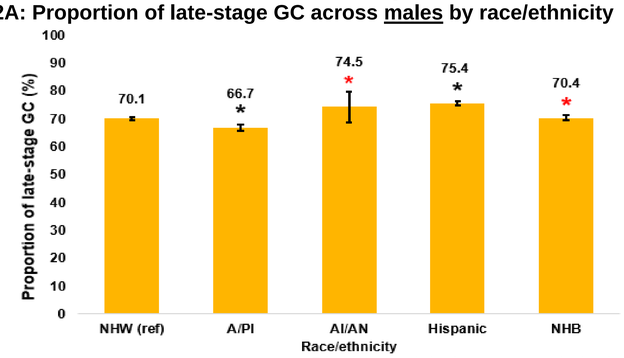
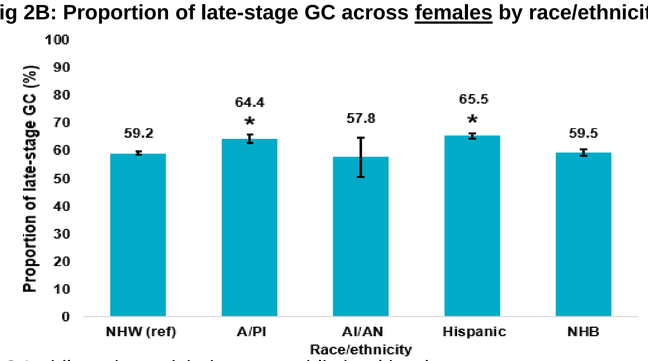


Fig 2B: Proportion of late-stage GC across females by race/ethnicity



Black asterisk denotes statistical significance derived with 95% C.I while red asterisk denotes public health relevance

FUTURE DIRECTIONS

- Design community-based interventions in collaboration with community leaders tailored for high-risk groups, such as:
  - Individuals aged 35-54 years old
  - Males
- High-risk groups should be considered for malignant tumor screening if/when symptoms arise
- Study *H.pylori* prevalence across the high-risk groups

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