HEALTH INEQUALITIES IN NAFLD DISTRIBUTION AND OUTCOMES: A NATIONWIDE ANALYSIS OVER A DECADE

Authors::

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BACKGROUND:

- Non-Alcoholic Liver Disease (NAFLD) is becoming progressively more prevalent as obesity and DM rise
- The massive burden of disease owing to NAFLD has necessitated an effort to understand better the epidemiological, history, and progression of the disease
- We aim to review and analyze these health disparities and trends over the last decade.

METHODS

- We conducted a retrospective review on NIS years 2008-2018
- International classification of disease (ICD) codes identified variables, including NAFLD
- Chi-square test, logistic, and multivariate analysis was performed to analyze comparisons and find odds ratios.

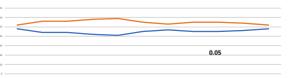
RESULTS

- A total of 2,473,982 NAFLD patients are included in this analysis, out of which 234,533 survived, and 2,239,449 had died over the ten years
- Females had a higher percentage of NAFLD that both survived (56% vs. 44% p<0.05) and died (54% vs. 46% p<0.05) compared to males. Females also had decreased odds of mortality compared to males [0.94 (0.89-0.96) p<0.05].
- Trends over ten years showed that both Whites and females had a decreasing mortality rate over the decade as seen in Figure 1 and 2 respectively.

Whites and females have higher rates of prevalence and mortality, while females and Hispanics were both found to have lower odds of mortality. Concomitant comorbidities play a significant role in mortality in this patient population, as does teaching versus non-teaching hospital admission. These findings can help us better educate our scientists, physicians, and leaders to improve care in

this population.

Characteristic	NAFLD Who Survived	NAFLD Who Died	P Val
	N=234,533	N=2,239,449	
Patient Age, mean (SD)	55	63	p<0.
Sex			p<0.
Female	131,151 (56%)	1,221,843 (54%)	
Male	103,382 (44%)	1,017,606 (46%)	
Race N(%)			p<0.
White	163,680 (70%)	1,637,709 (73%)	
Black	22,093 (9%)	196,624 (9%)	
Hispanic	34,640 (15%)	262,463 (12%)	
Asian or Pacific Islander	5,066 (2%)	52,627 (2%)	
Native American	1,994 (0.9%)	23,066 (1%)	
Other	7,059 (3%)	66,736 (3%)	
Insurance, N(%)			p<0.
Medicare	89,920 (38%)	1,272,455 (57%)	
Medicaid	40,785 (17%)	322,149 (14%)	
Private	87,903 (37%)	568,820 (25%)	
Uninsured	15,924 (7%)	89,801 (4%)	
Household Median Income, N(%)			p<0.
1-38,999	66,490 (28%)	680,569 (30%)	
39,000-47,999	61,823 (26%)	591,662 (26%)	
48,000-62,900	58,164 (25%)	565,102 (25%)	
>63.000	48,056 (21%)	405,116 (18%)	
Bed Size, N(%)	46,030 (21%)	403,110 (18%)	p<0.
Small	37,854 (16%)	279,931 (13%)	h~0.
Medium	63,699 (27%)	566,805 (25%)	
Large	132,980 (57%)	1,392,713 (62%)	
Hospital Region	132,980 (3776)	1,392,713 (02%)	p<0.
Northeast	38,510 (16%)	306,357 (14%)	p~0.
Midwest	50,893 (22%)	526,047 (22%)	
South	93,368 (40%)	915,263 (41%)	
West	51,785 (22%)	491,783 (22%)	
Hospital Location	51,765 (2276)	491,705 (2270)	p<0.
Rural	18,551 (8%)	2,239,449 (6%)	p~0.
Urban	215,981 (92%)	2.098.588 (94%)	
Hospital Teaching Status	215,961 (9270)	2,070,500 (9470)	p<0.
Teaching Status	91,679 (39%)	706,546 (32%)	p<0.
Non-Teaching	142,854 (61%)	2,239,448 (68%)	
harlson Comorbidity Index, mean (SD)			p<0.
0	56,476 (24%)	246,339 (11%)	р×0.
1	60.252 (26%)	188,562 (8%)	
2	40,433 (17%)	232.903(11%)	
3	77,349 (33%)	1,565,599 (70%)	
LOS, days (SD)	4	5	p<0.
2005, uays (5D)	7	5	р×0.
Total Hospital Charges (SD)	62,247.00	\$49,490.00	p<0.



2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

