

**P77 USE OF AUDIT C SCORE TO IDENTIFY ALCOHOL USE DISORDER AMONG INPATIENT POPULATION AT A SECONDARY CARE HOSPITAL**

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**Introduction** Alcohol use disorder (AUD) is attributed to estimated 1.3 million hospital admissions per year, costs £3.5 billion annually to National Health Services (NHS)(1). Both Public Health England and the NHS Long Term Plan advocate for maximising every contact with patients with a focus on

preventative medicine. The burden of such contacts has implications for both individuals and health care services. We aim to describe the prevalence of harmful alcohol use by AUDIT-C score among hospitalised patients at a secondary care hospital in England.

**Methods** A retrospective cohort included all adult patients (>16 years) admitted to a single, large, acute secondary care NHS hospital for 1-year from 1st April 2019. All patients were offered alcohol assessment by AUDIT-C. Increasing and high-risk alcohol use was defined as AUDIT-C 5–10 and alcohol dependence as 11–12. Variation in AUDIT-C was determined by age, sex, ethnicity and admission type/specialty. Patients admitted directly to intensive care were excluded.

**Results** Over 1-year period, AUDIT-C was offered to n=66403 hospitalised patients, with 97.7% accepting alcohol assessment. The proportion with harmful alcohol use was 14.4% (12.2% high risk and 2.1% alcohol dependence).

Variations in harmful alcohol use are shown in table 1.

**Conclusion** We demonstrated robust application of AUDIT-C tool in identifying alcohol misuse among a large contemporaneous cohort of hospitalised patients with high acceptance rate and found 1 in 7 admitted patients had harmful alcohol use. The findings support incorporation of AUDIT-C score into inpatient alcohol screening pathways as an effective way of identifying clients in most need.

**Abstract P77 Table 1** AUDIT-C was determined by age, sex, ethnicity and admission type/specialty

	Increase and Higher risk% <sup>1</sup> (AUDIT-C 5-10)	Alcohol dependence% <sup>1</sup> (AUDIT-C 11-12)	P*:#, OR (95% CI) (AUDIT-C ≥ 5)
<b>Age-group*</b>			
18-19	23.69	0.29	11.7 (9.08-15.31)
20-29	16.54	0.94	8.3 (6.7-10.2)
30-39	15.20	4.70	9.6 (7.8-11.8)
40-49	16.61	6.21	11 (8.9-13.4)
50-59	18.42	3.87	10.2 (8.3-12.4)
60-69	15.91	2.55	8.6 (7.02-10.6)
70-79	10.84	1.03	3.8 (3.1-4.7)
80-89	5.18	0.31	2.4 (2-3.08)
>90	2.34	0.09	1.6 (1.29-2.05)
<b>Sex*</b>			
Male	67.48	72.19	0.397 (0.37-0.42)
Female	32.52	27.18	
<b>Ethnicity</b>			
White <sup>#</sup>	11.93	2.19	0.94 (0.9- 1)
Black*	6.41	1.71	2.3 (1.89-2.8)
Mixed <sup>#</sup>	13.66	4.83	1 (0.8-1.3)
Asian*	4.66	1.55	3.5 (2.5-5)
SE Asian*	3.47	1.08	4.04 (3.1-5.2)
<b>Admission Type*</b>			
Emergency	57.45	80.46	
Elective	21.22	8.21	
Clinic	1.80	1.23	
GP	11.29	8.71	
Other	2.49	1.38	
<b>Top 5 Specialty</b>			
	Inc & High Risk%	Top 5 Specialty	Dependence%
Burs care	27.0	Hepatology	9.01
Maxillo-Fascial	21.47	Endocrinology	8.70
Thoracic Surgery	20.62	Rheumatology	4.76
Cardiac Surgery	19.85	General Medicine	4.70
Plastic Surgery	19.56	A&E	3.58

\*P significant <0.01 after adjusting for other variables (age, sex, ethnicity).

<sup>#</sup>P Non-significant >0.05

<sup>1</sup>The percentage was calculated for total number of admissions in individual groups

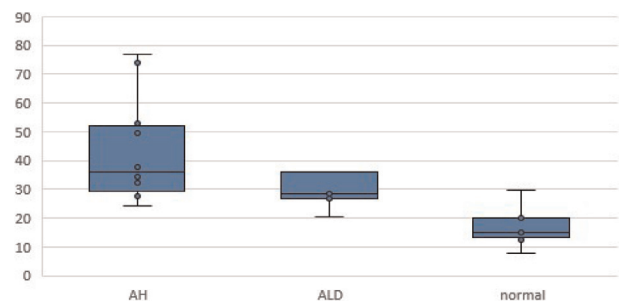
**P78 PATIENTS WITH ALCOHOL RELATED LIVER DISEASE HAVE HIGH LEVELS OF OXIDATIVE STRESS**

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**Background and Aims** Chronic alcohol use generates reactive oxygen species (ROS) through the CYP2E1 pathway and contributes to the pathogenesis of alcohol-related liver disease (ALD). However, the understanding of the role of ROS in alcoholic hepatitis (AH) is lacking. We aimed to measure oxidative stress in well-defined cohort of ALD and AH patients and compare with healthy subjects using a well-validated and reproducible assay.

**Method** Patients from University Hospitals Plymouth with AH (new jaundice, coagulopathy, heavy alcohol use, discriminant function [DF]>32); ALD (ongoing alcohol use, no new jaundice, cirrhosis) and healthy volunteers (HV) were recruited. Model for end stage liver disease (MELD) and DF scores were used to evaluate liver disease severity. Thiobarbituric acid reactive substrate (TBARS) assay kit was used to measure



**Abstract P78 Figure 1** MDA concentrations (micromolar)