

A Service Evaluation of Patients Presenting to the Emergency Department with Suicide Attempts or Ideation and the Association with Alcohol Intoxication

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INTRODUCTION

Background:

Alcohol is a major risk factor for completed suicide¹. Studies have shown evidence of an association between alcohol dependence and impulsivity of suicidal acts, ideation and self-harm (SaiSH)^{2,3}. Brief interventions for alcohol are known to be effective in an Emergency Department (ED) setting. With this in mind, reducing alcohol use in this group could potentially reduce future presentations with SaiSH, and brief interventions could be readily incorporated into ED psychiatric work.

Addenbrooke's Hospital, Cambridge, is a large teaching hospital, with over 4000 presentations per year assessed by the Adult Liaison Psychiatry Team. Presentations to ED for SaiSH make a significant proportion of patients seen by the Liaison Psychiatry team. We wished to review the extent to which such cases were associated with alcohol use and in these cases whether there was any intervention attempted with respect to the alcohol use.

Aims and Hypotheses:

- To evaluate the relationship between alcohol use and presentations with SaiSH to ED.
- In cases where alcohol is relevant, to determine whether an alcohol-specific intervention was offered.
- If there is a gap between the proportion of cases where alcohol was implicated and specific interventions offered, we may need to train ourselves to deliver this.

METHODS

- Retrospective cross-sectional case-record review of all patients referred to the liaison psychiatry team between 31/5/2019 - 6/6/2019.
- Inclusion criteria: age 18-64, presented to ED, primary presentation of SaiSH.
- Records were reviewed with an a priori coding including: age, sex, primary reason for attendance (suicide, self-harm, suicidal ideation, other), alcohol use in relation to presenting event, impulsivity, presence of mental illness, and delivery of advice on alcohol use.
- Impulsivity was defined as action within one hour of first thoughts and no evidence of preplanning.
- Data is presented with descriptive statistics, but the relationship between alcohol use and impulsivity was analysed using Fisher's exact test.
- Acute NHS Trust Research and Development approval was granted.

RESULTS

- 119 patients were referred during the study period, 28 of these met the inclusion criteria.
- There were 9 suicidal acts, 7 cases of suicidal ideation and 12 cases of self-harm, see figure 1.

Demographic	Value	Frequency	Percent
Age	Below 25 years	8	28.57
	25 – 34 years	7	25.00
	35 – 44 years	5	17.86
	45 – 54 years	8	28.57
	55 – 64 years	0	0.00
Gender	Male	29	55.77
	Female	23	44.23
Nature of Event	Suicidal Act	9	32.14
	Overdose	7	
	Cutting	2	
	Suicidal Ideation	7	25.00
	Overdose	4	
	Hanging	1	
	Not Specified	2	
	Self-harm*	12	42.86
	Overdose	10	
	Cutting	2	
Jumping	1		
Head hitting	1		

Figure 1: Demographics of study.
*two patients used two method of self-harm in the same event.

- Eight patients were drinking alcohol at the time of the act, see figure 2.
- There were 19 impulsive presentations, of which seven (37%) had been drinking alcohol, see figure 3.
- Of the nine planned events, one (11%) had drunk alcohol.
- There was a trend of an association between the impulsivity and alcohol use, but this was not statistically significant (Fisher's exact test, two-tailed, $p=0.214$).
- Four of the eight who had been drinking at the time of the event were offered advice or an intervention regarding alcohol misuse, including two cases that were already involved with our substance misuse team.

RESULTS

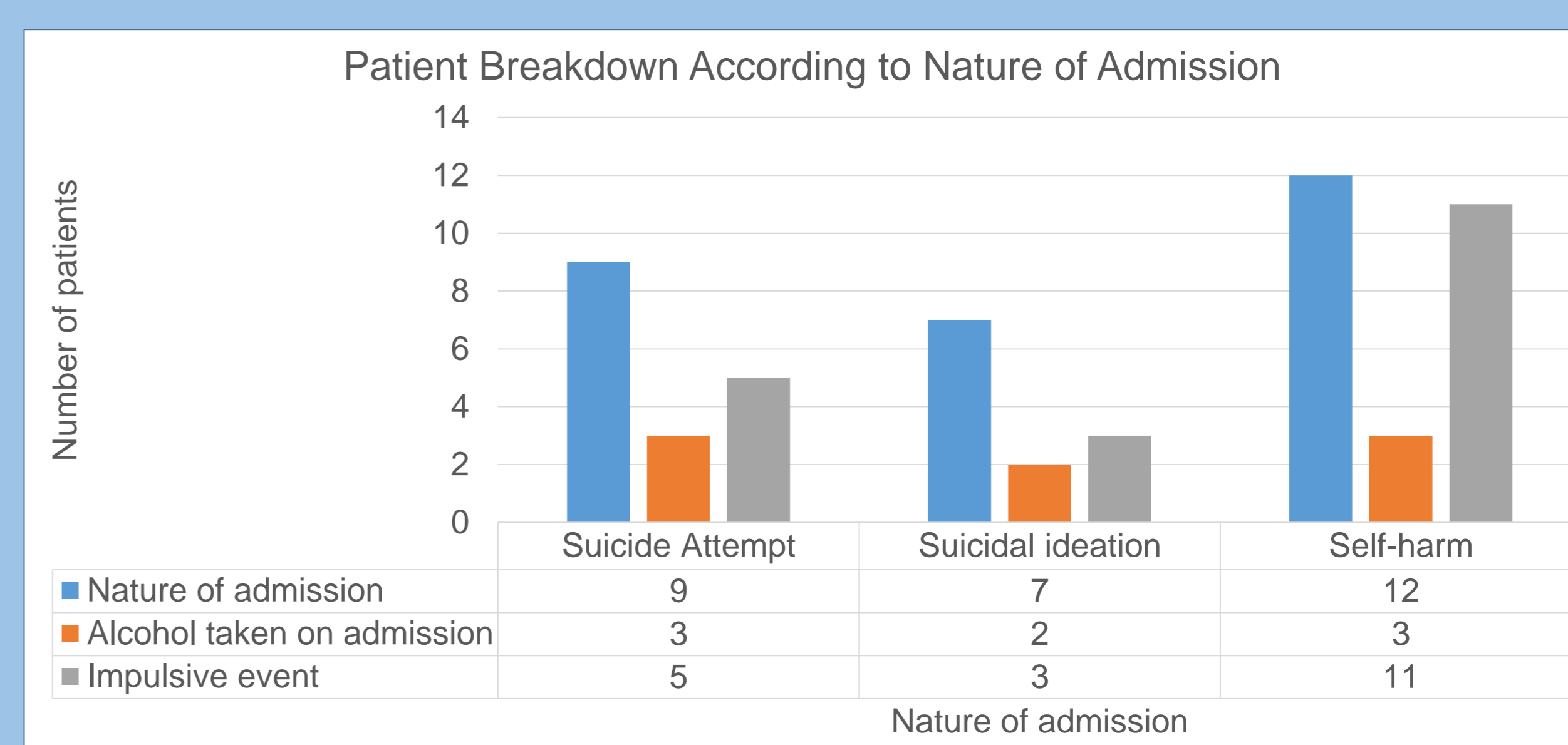


Figure 2: Breakdown of patients according to the nature of their admissions

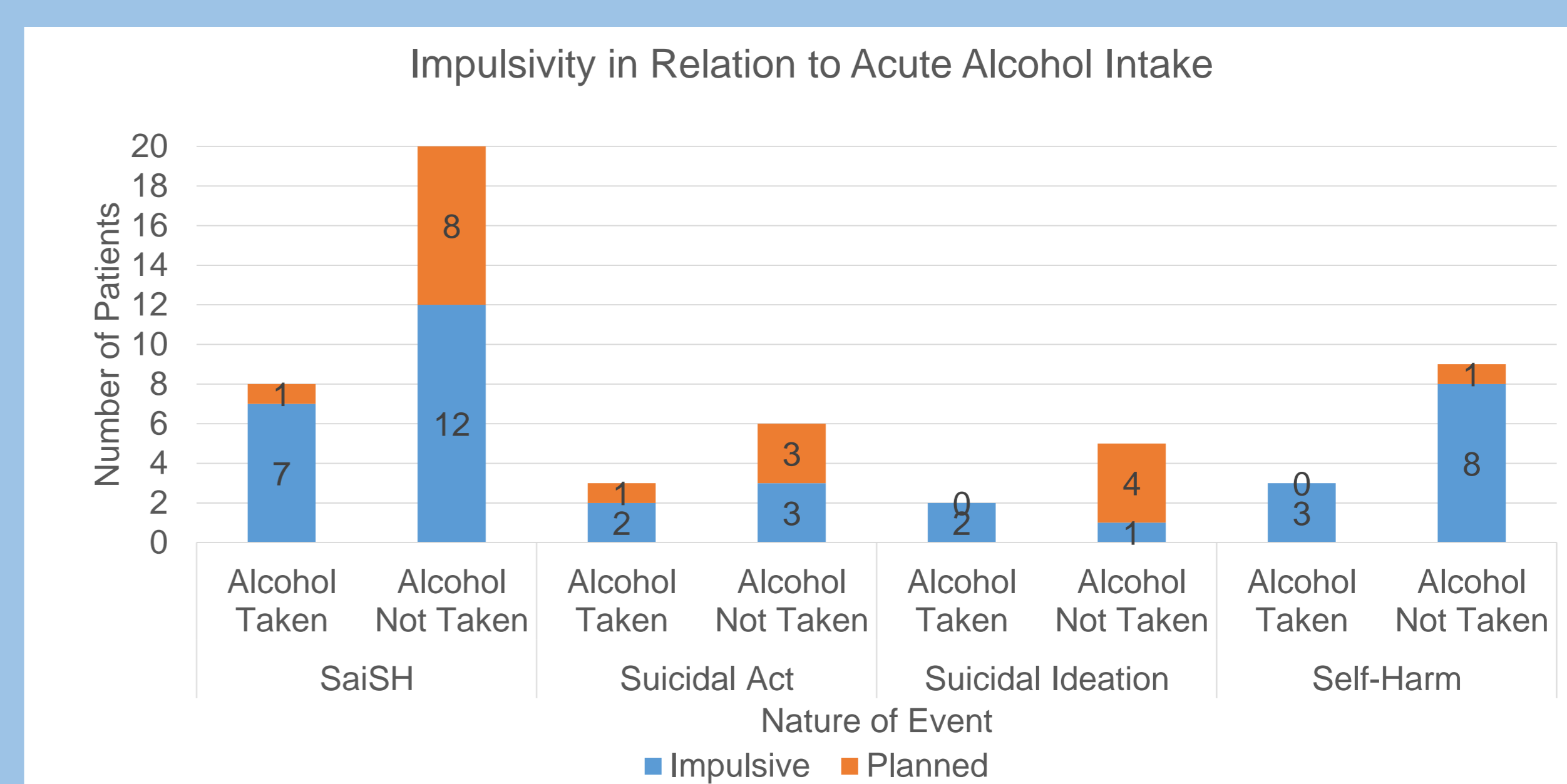


Figure 3: Breakdown of patients according to impulsivity and relation to alcohol consumption.

DISCUSSION

In our study, there was a reasonable proportion of impulsive admissions related to alcohol (37%). However, only half of these patients were offered advice or an intervention for their alcohol use. Furthermore, where intervention had been offered, this was not necessarily a standardised (evidence-based) intervention. By addressing the relationship of alcohol use and impulsivity of SaiSH presentations to ED with patients at this stage, we could potentially improve the long-term outcome for these patients both in terms of their general health and their risk for re-presentation to ED with SaiSH acts. Potential interventions at this stage could involve the systematic use of evidence-based Alcohol Brief Interventions, such as those described by the World Health Organisation⁴.

Weaknesses:

- Data was collected retrospectively from case notes and therefore there may be unknown confounding variables or missing data.
- Small sample size meaning that the results were underpowered for association between alcohol and impulsivity.

Outcome and plan:

The liaison psychiatry department will train all liaison staff in brief interventions for alcohol use associated with SaiSH presentations to ED. This will be followed by a future audit of the use of this once everybody has been trained.

CONCLUSIONS

A quarter of ED presentations with SaiSH were impulsive acts following alcohol use. Only half of these received an intervention regarding their alcohol use and presentation. Increasing this input to all cases could improve the risk management in roughly 200 people per year.

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