

A randomised controlled trial of brief intervention strategies in patients with alcohol related facial injury

INTRODUCTION

Alcohol misuse is a growing problem in Scotland. Thirty-two percent of men and 17% of women in Glasgow exceed the recommended weekly number of units of alcohol. The cost of alcohol misuse to the NHS in Scotland was £110.5 million for the year 2002-3 and is increasing.

The complex link between alcohol and violence is well documented. The majority of victims of crime state that their assailant was under the influence of alcohol and many victims of assault have themselves consumed alcohol prior to their injury.

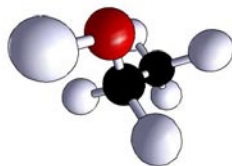
The Maxillofacial region is one of the most frequently injured in assaults on adults; 24% of facial injuries in the UK result from violent behaviour. Many of these injuries require complex surgical intervention. This has a significant demand in terms of manpower as well as marked financial implications for the NHS. In addition, the long lasting effects on patients both physically and psychologically are well documented.

Despite the fact that most alcohol related facial injuries are successfully managed surgically, the underlying cause, which is often alcohol misuse, is not adequately addressed. A recent Welsh study has demonstrated that a nurse delivered brief intervention in a maxillofacial unit is more effective than no intervention in encouraging patients with facial injuries to reduce their alcohol consumption.

The aims of the current study were:

- To describe a population of hazardous drinkers in the West of Scotland with alcohol related facial trauma.
- To determine the effect of two methods of nurse delivered brief intervention in reducing alcohol related drinking variables in a population of hazardous drinkers with alcohol related facial injury
- To explore the possibility of introducing a brief motivational intervention package for alcohol misuse into the Oral and Maxillofacial Outpatient Clinic

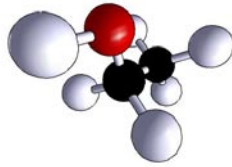
Patients attending Maxillofacial Outpatient Clinics over 16 years of age and who had sustained facial trauma within the preceding 2 weeks were asked to partici-



pate. They were randomly allocated to receive either a Brief Motivational Intervention (BMI) administered by a nurse or a standard alcohol information leaflet (Greater Glasgow Health Board: Alcohol: Questions and Answers).

FINDINGS

1. It is possible to operate nurse led motivational interventions in a busy oral & maxillofacial out-patient consultant clinic.
2. 78.3% of the patients recruited for the study scored 8 or above in AUDIT (Alcohol Use Disorders Identification Test) i.e. were hazardous drinkers.
3. One quarter of this group of patients had previous alcohol related facial injuries. These patients were significantly more likely to have higher AUDIT scores than those with a first injury.
4. Only a small proportion of patients were female. Because of this statistical analyses were conducted for males only.
5. This investigation confirmed that the motivational interview produced a significant reduction in drinking days when compared to the leaflet method of intervention in patients with high initial AUDIT scores at twelve months following recruitment. This change was not seen for patients with low to moderate AUDIT scores.
6. No statistically significant differences in outcome measures were detected between the two groups at three months post intervention. This is an interesting finding which, is in accordance with previous published data by Smith et al from Cardiff, who showed no change in drinking behaviour in control or treatment groups at three months but a positive effect of the intervention in terms of reduction in drinking behaviour at twelve month.
7. Researchers were able to collect data from 69% of the patients at the twelve months follow-up interval. The only variable seen to affect this was age with younger patients more likely to return for the twelve month assessment. Additionally, distance from hospital adversely affected follow up in person at 3 months but not at 12 months, which we attribute to the increase in financial incentive between the two periods.
8. There is a considerable debate regarding the appropriateness of using AUDIT score as an entry criterion for provision of brief intervention. This resulted in the exclusion of 5 patients who had been binge drinking at the time of injury because their AUDIT scores were below the threshold and further excluded 8



patients who had been drinking at lower levels

- 9. 24.9% of the patients had previous alcohol related facial injuries. Treatment of these patients has significant financial implications for National Health Service resources.

IMPLICATIONS

The majority of patients attending Oral and Maxillofacial outpatient clinics in the West of Scotland with facial injuries are hazardous drinkers. This study has demonstrated that there is a clinical need for an alcohol screening and intervention service within oral and maxillofacial trauma clinics. It has further shown that it is feasible to provide a nurse led alcohol screening and intervention service in a busy clinic and to achieve reasonable return rates for follow up should this be required. This study has demonstrated that a nurse led BMI is more effective in helping a proportion of patients to alter their drinking behaviour than a simple alcohol leaflet and that the effects of BMI are maintained up to 12 months post intervention. Interestingly, it would seem that the patients with the highest initial AUDIT scores derived most benefit from the BMI. This in itself is an unusual finding as it is generally accepted that BMI is most effective for patients who are hazardous drinkers rather than dependent drinkers.

This study has confirmed that alcohol related facial injury is a recurrent phenomenon occurring again in approximately 25% of patients and recurrence has significant association with higher initial AUDIT scores. In addition to reducing alcohol consumption BMI can reduce the rate of repeat injury and this phenomenon merits further investigation

This service could prove invaluable to patients and avoid the tertiary referral of many non-dependent drinkers to specialist agencies or alcohol services We have shown that a nurse provided BMI for alcohol is one effective way of approaching this problem and would recommend that all services dealing with alcohol related trauma consider incorporating such interventions as part of their routine trauma management.

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ALCOHOL INSIGHTS

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