

A randomised trial of brief intervention strategies in patients with alcohol related facial trauma sustained as a result of interpersonal violence



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- **Worldwide 0.5 million people die annually as a result of interpersonal violence**
- **For every death a further 20-40 people require medical intervention**
- **The burden on the health services is huge**
- **In Scotland the treatment of injuries related to violence consumes 3-6% of the annual NHS budget**

Alcohol and Violence



- **Increased risk of becoming victim and perpetrator of violence**
- **Consumed in preparation for violence**
- **Part of gang culture, confidence builder**
 - Initiation
 - Pre and post gang fights
- **Witnessing violence can lead to alcohol use as a coping strategy**

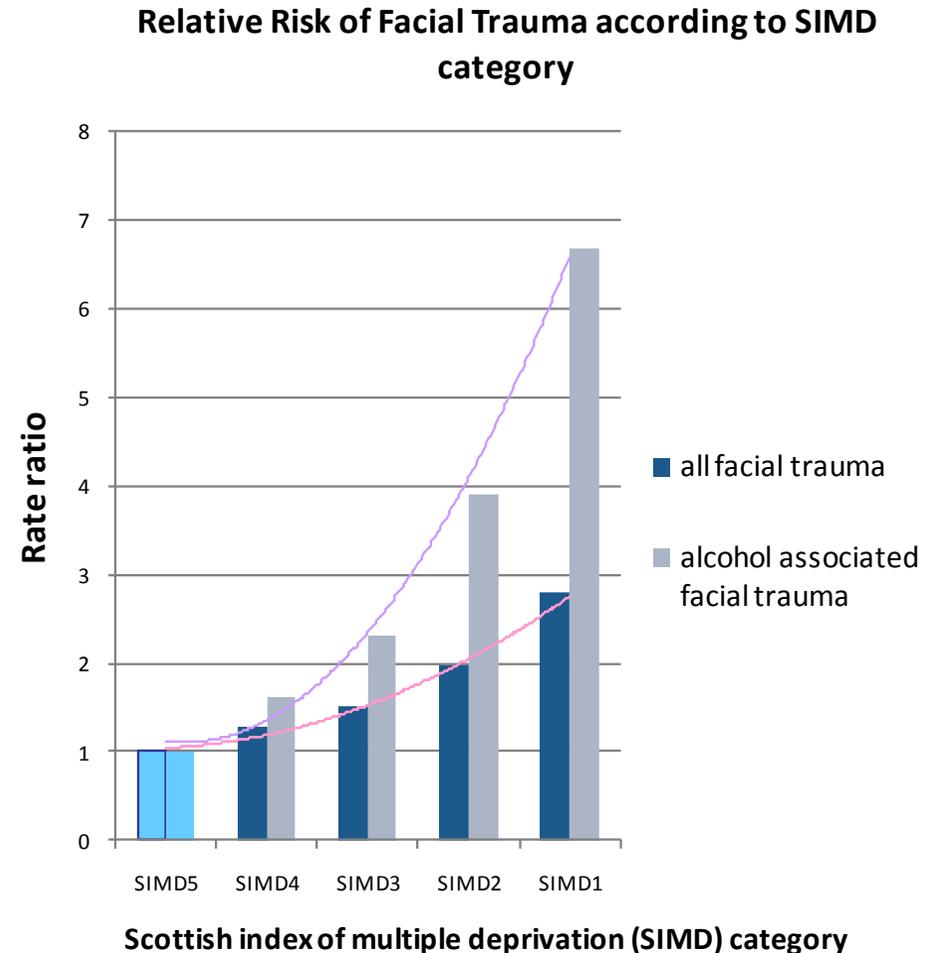


- **Reduced self control**
- **Reduced information processing skills**
- **Reduced ability to detect risk**
- **Increased impulsivity/sensation seeking**
- **More likely to resort to violence as problem solving strategy**

- **Most likely site of any assault is the face, head or neck**
- **1000 facial trauma patients in the West of Scotland annually**
- **Potentially disfiguring with a long impact on life and opportunity**



- **Young (most under 34)**
- **Male (90%)**
- **Alcohol (over 80%)**
- **Low socioeconomic status**
 - 7x greater risk for deprived individuals when alcohol is a factor
- **Interpersonal violence (over 70%)**



Are BMI effective for facial trauma patients?

- **BMI delivered by a nurse are more effective in helping patients to cut down their drinking than a leaflet**
- **Study in Cardiff produced similar results**

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Nurse-delivered brief interventions for hazardous drinkers with alcohol-related facial trauma: A prospective randomised controlled trial

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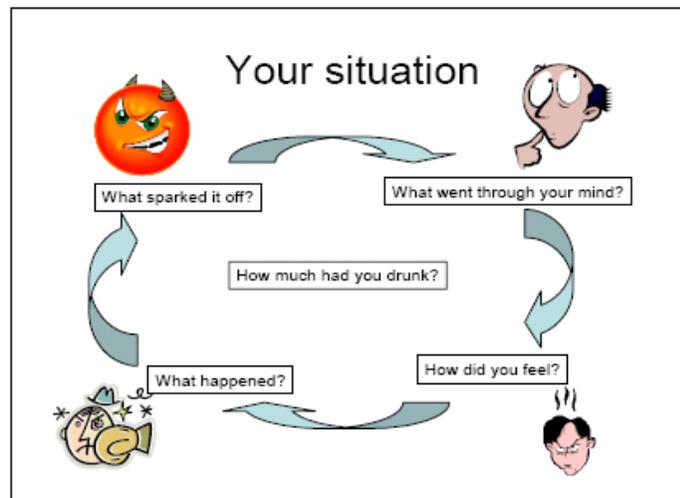
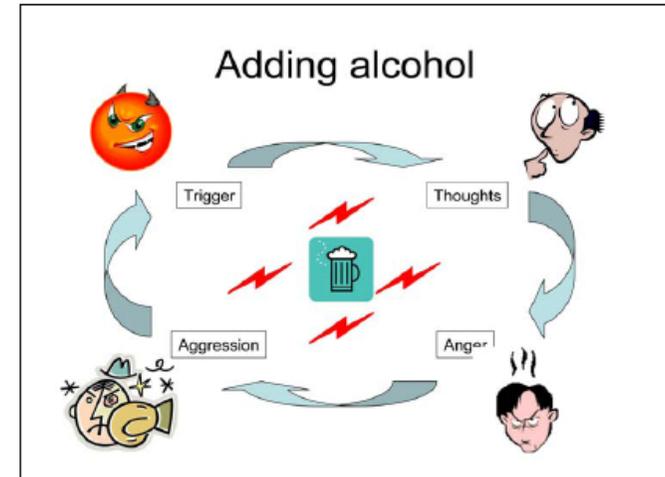
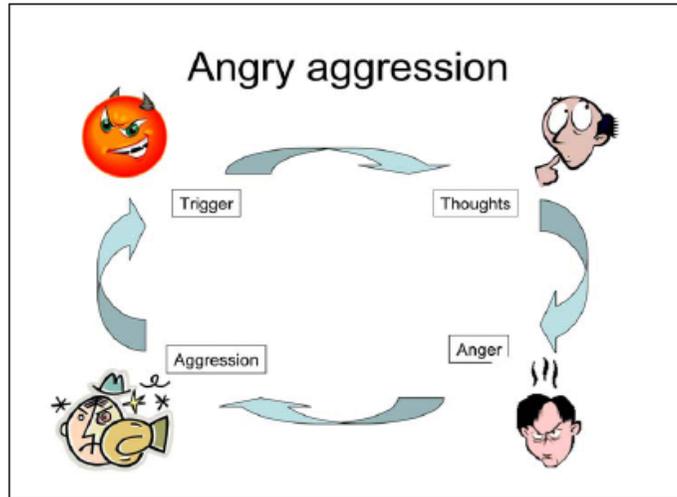
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- **Most are long programmes not easily used in acute trauma units**
- **COVAID** McCulloch, McMurrin, & Worley, 2005, McMurrin & Cusens, 2003
 - Control of Violence for Angry Impulsive Drinkers
 - 10-session cognitive behavioural programme
 - which has been tested on a small number of offenders and found to be effective, however, numbers are low and there is a high drop-out rate
- **SS-COVAID is a one-off highly manualised intervention based on COVAID delivered in 25-30 mins**
- **It is a useful way for patients to understand how violence can arise and escalate**

A model of angry aggression



- **Avoid**

- **Trouble before it gets a chance to happen**

- **Change**

- **Things that increase the risk of trouble**

- **Escape**

- **When you spot trouble brewing**

Reducing the odds



Avoid
Avoid trouble spots
Avoid people who cause trouble
Avoid getting drunk

Change
Change the way you think about people
Change your angry feelings .. Breathe deeply and count to 10
Change your behaviour – keep the peace
Change your drinking

Escape
Escape the situation when you spot trouble
Escape the situation when you feel angry
Escape the situation when you get too drunk



What have you got to gain?

If you use some of the
strategies we have
discussed.....?



- **RT of SS-COVAID (94) and BMI for alcohol (93)**
- **Delivered by 2 nurses trained in BMI and SS-COVAID. Follow up at 6 and 12 months by phone**
- **Male trauma patients involved in interpersonal violence while drinking alcohol**
- **AUDIT over 8**



- **Baseline measures**
 - AUDIT
 - ARAQ=alcohol related aggression questionnaire
 - Self reported drinking and violence factors
- **Followed up at 6 and 12 months post injury by phone**
 - Same factors assessed
- **Interviewed at follow up by a different nurse**

- **199 entered trial-data from 187 patients analysed**
- **82% followed up at 6 months, 62% at 12 months**
- **All male**
- **Age range 16-59 (75% under 35)**
- **99% white**
- **72% single**
- **64% employed**
- **74% injured in a public place**

- **90% considered themselves to be a victim**
- **ARAQ scores 0-60 (84 is the maximum score). The majority were under 20**
- **15% at least one previous conviction for violence**
- **33% been in fights previously**
- **13% initiated fights previously**
- **29% previous victim of assault**
- **10% considered themselves partly responsible**

Drinking factors at the time of injury

- All drinking at the time of injury
- AUDIT scores 8-40 (40 is the maximum score)
- 27% both they and their attacker were drinking
- 9% alcohol made them more aggressive
- 44% alcohol made them less aware
- 20% blamed the incident on their attacker's drinking
- **50% had sustained a previous alcohol related injury**

What thoughts will you take away from your session with the nurse?

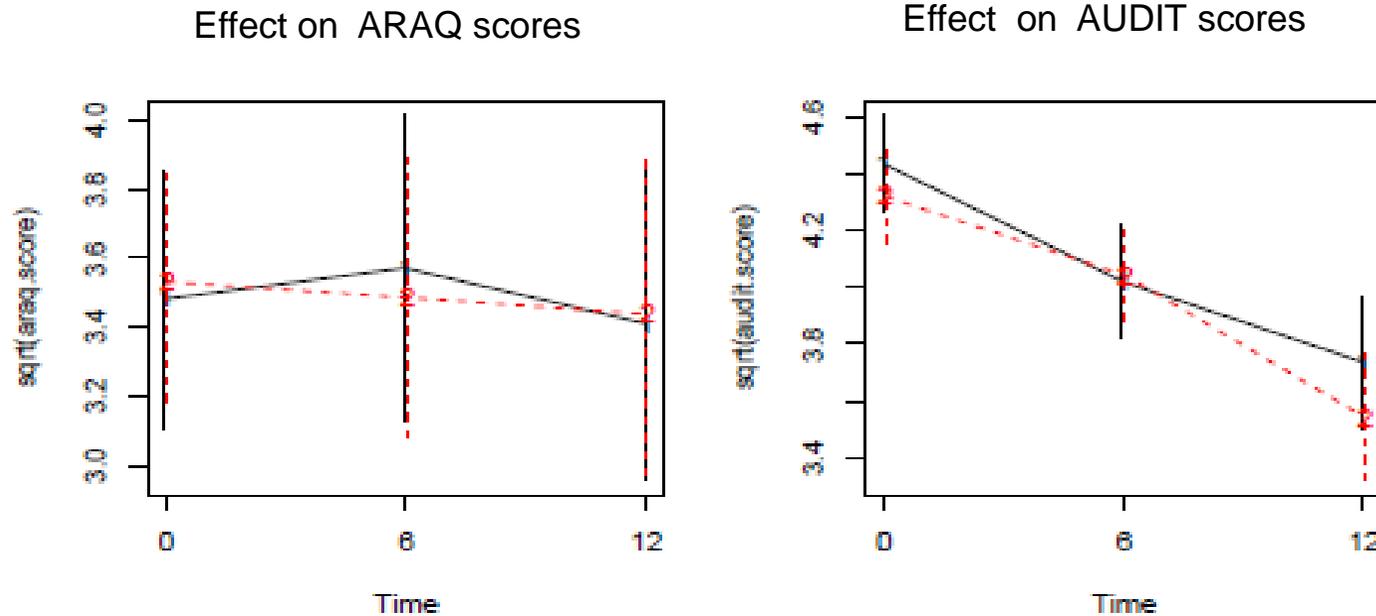
'I have to get my life back on track'

'That I shouldn't be drinking so much so young'

'Helped me to realise I drink too much, gave me a bit of relief'

'Seeing what I had to gain by not letting it happen again'

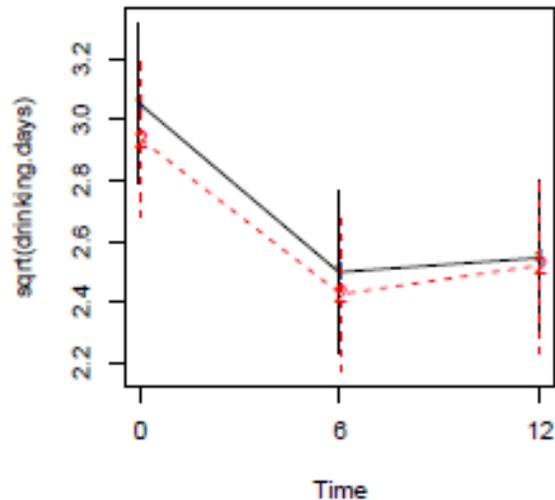
'That perhaps I need to find other things to do at the weekend rather than drink'



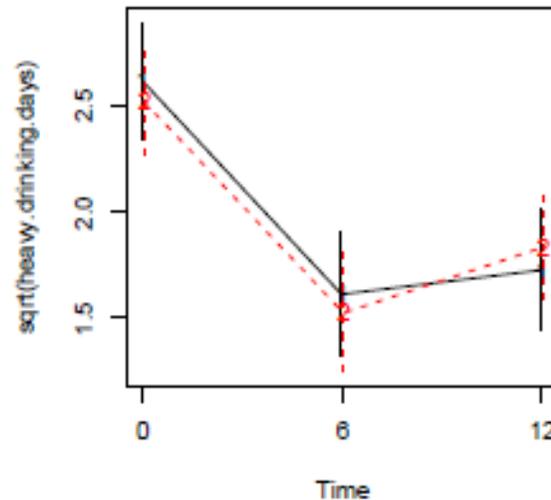
- Both COVAID and BMI significantly reduced AUDIT scores at 6 and 12 months ($p < 0.05$)
- Neither intervention significantly changed the total ARAQ scores
- There was no significant difference between the two interventions

Effect on drinking behaviour

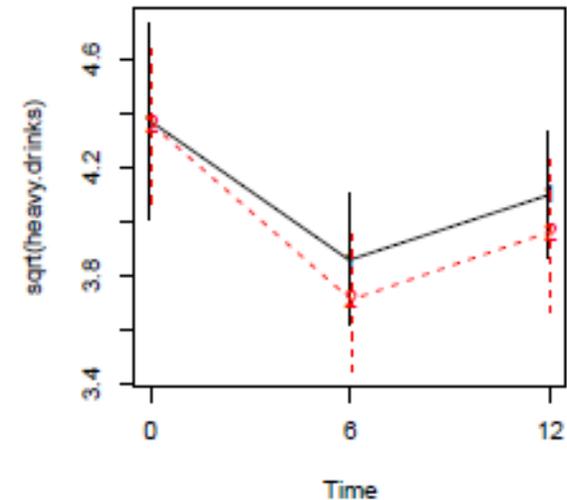
Drinking days in
past 30 days



Heavy drinking
days in past
30 days



Drinks per
heavy drinking
day



- Both interventions reduced self reported drinking parameters significantly compared with initial values-
- There was no difference between interventions

- **BMI and SS-COVAID are equally effective at reducing alcohol consumption and AUDIT scores in a population of male trauma patients who have been involved in violence**
- **Neither intervention affected aggression scores-this is also true when we look at subset ARAQ scores and self-report**
- **The nursing staff found SS-COVAID easier to use**

Why might aggression scores be unaffected?

- **The study group was not inherently aggressive (most ARAQ scores under 20), most considered themselves victims therefore no huge reduction to be made**
- **ARAQ was not a useful measurement tool**
- **The intervention has more effect on alcohol than aggression-many of the strategies discussed involved alcohol-this may have been the only route for change for these patients**
- **The knock on effect for these patients may be that risk of injury will reduce with drinking**

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