

**Determining the effectiveness of alcohol screening and brief intervention approach in a young people's sexual health service**

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### INTRODUCTION

Sandyford offers an integrated sexual, reproductive and emotional health service across Greater Glasgow and Clyde, with services in the city centre and at several locations across the health board area. The Place is a "one stop shop" for young people up to the age of 17 giving them the information to make informed choices about their own health and well being. Full sexual health clinical services are combined with opportunities for group work, a condom distribution service, specialised counselling services, and tailored information services. Information is provided for young people on services across Greater Glasgow & Clyde, including local voluntary sector youth health and information services.

In 2003 a needs assessment was carried out within the Place young peoples' service at Sandyford to look at the impact of alcohol on young people's lives and how that might be relevant to the sexual health service. Three hundred young people completed a questionnaire about their alcohol use. Adverse events were common: 42% said they had experienced concern or hurt through someone else's drinking, 26% had been injured or hurt, 12% had been in hospital, and 25% admitted that they had been in trouble with the police as a result of alcohol use. Thirty five percent said that their alcohol use was linked to unprotected sex, and 26% that alcohol had been linked to sex they later regretted.

The results of the needs assessment identified the opportunity to improve young peoples' knowledge of the effects of alcohol and provide early intervention and support at the clinic. A funding proposal was sent to the Alcohol Education Research Council (AERC) to pilot alcohol screening and brief intervention at the Place clinic.

The brief intervention model was designed to be responsive to young people attending the Place clinic who binge drink and whose alcohol consumption borders on the early stages of problem drinking behaviour, to offer and deliver important health education and support.

This report will discuss the practical and service implications involved in implementing routine screening and brief intervention alongside the day-to-day running of the young persons' clinic, as well as examine the feasibility of integrating alcohol screening and brief intervention into the sexual health assessment offered to young people attending the Place clinic and potentially to other youth health services.

Before implementing the pilot:

- Staff at the Place clinical team reviewed the literature and chose an alcohol screening tool that was validated for young people and thought to be appropriate in the client group, then designed the pilot.
- Ethical approval from the local ethics committee and agreement from the appropriate research and development department were obtained.

- Information posters were designed, printed and displayed in Place waiting areas. The posters informed young people about the nature of the pilot and aimed to encourage participation. When the pilot was in progress information sheets were handed to young people as they entered the clinic waiting area. The information sheets explained the purpose behind the pilot and made clear involvement would be voluntary.
- The training needs of staff were identified.
- A short alcohol questionnaire was distributed to young people in the clinic waiting area.

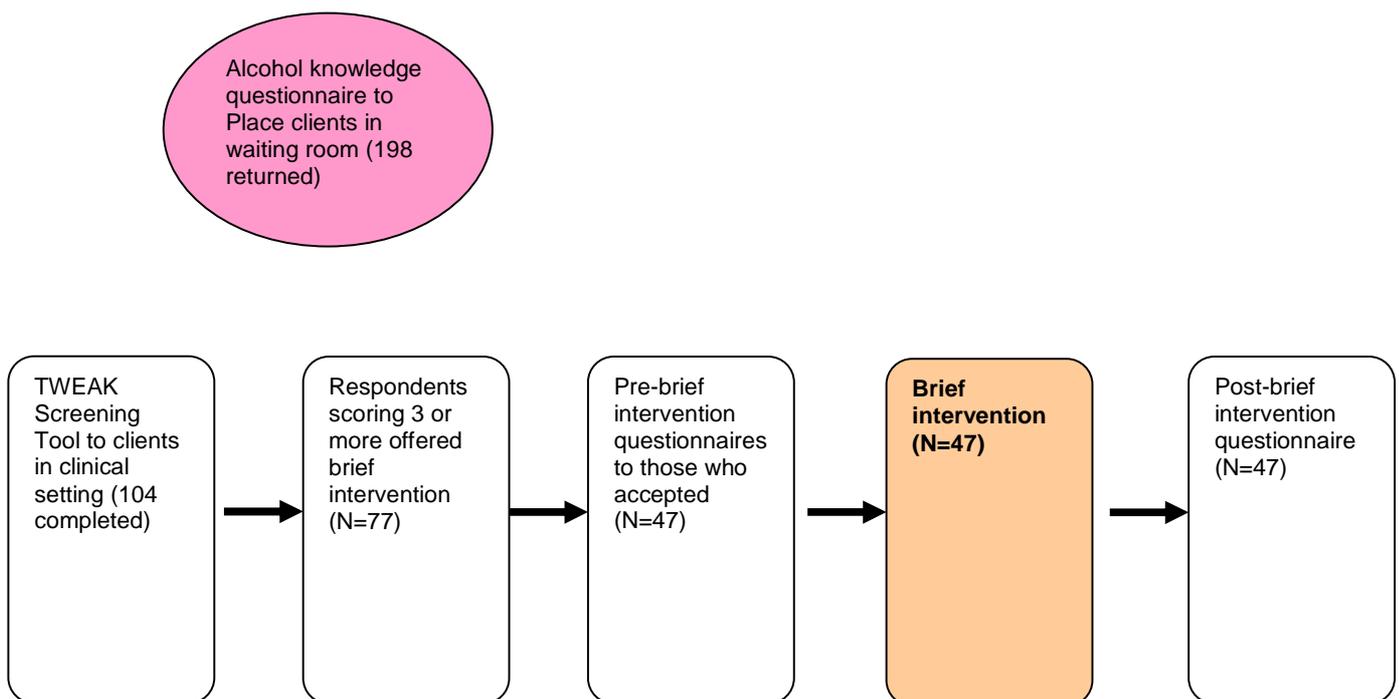
### Staff training

To prepare the groundwork for the pilot it was important to identify the training needs of staff. A short questionnaire was sent to core staff of the young people’s service asking what if any training about alcohol they had received in the past and inviting them to a training session. Ten people completed and returned the questionnaire. The results of the questionnaire helped shape the brief intervention training which was delivered to members of the young people’s team the week before the pilot commenced.

Eight nurses and three doctors attended the training and completed the staff questionnaire. Only three of the 11 remembered receiving previous training about alcohol and health, and one of the 11 had received training in brief interventions in the past.

Four rated their knowledge about alcohol and health as ‘good’, with the rest assessing their own knowledge as fair. Six rated their knowledge of brief interventions as ‘poor’ or ‘very poor’, with only one rating her knowledge as ‘good’. Only four rated their confidence in responding to alcohol-related issues as ‘high’, but 7 of the 11 estimated they came into contact with people who may benefit from brief interventions at least weekly. Formal post-training evaluation was not done due to time constraints, but informal feedback suggested an increase in confidence in raising alcohol issues with clients and knowledge about units of alcohol in various common drinks.

**Figure 1: Screening and brief intervention pilot model**



## Alcohol knowledge questionnaire

A short alcohol questionnaire containing eight basic questions about alcohol was distributed to young people in the clinic waiting area. Completing the questionnaire was voluntary and anonymous. Two hundred were handed out to young people by youth workers and 190 were completed and returned (95% return). Eighty-four percent of respondents were female (in keeping with the gender mix of the clinic) and 14% were male, with 3% of respondents not answering that question. The age range for female respondents was 12-17, with a mean of 16 years. The age range for male respondents was 14-17, with a mean of 16 years. Twenty-five percent of respondents were under 16 years of age.

- **34%** of respondents did not know about safe drinking units
- **48%** drank at weekends; this included Friday and Saturday,
- **41%** did not know where to get help, advice and information about alcohol.
- **59%** knew a little or had some information about alcohol

The responses to the questionnaire identify gaps in knowledge about alcohol and about support services. A large proportion of young people did not know about safe drinking units. There is no guidance on safe units for young people under 18, so 'safe units' in this context was assumed to be the UK government guidance for adults (2-3 units per day for women and 3-4 units per day for men, with at least two alcohol-free days per week).

**Figure 2. Responses to alcohol knowledge questionnaire**

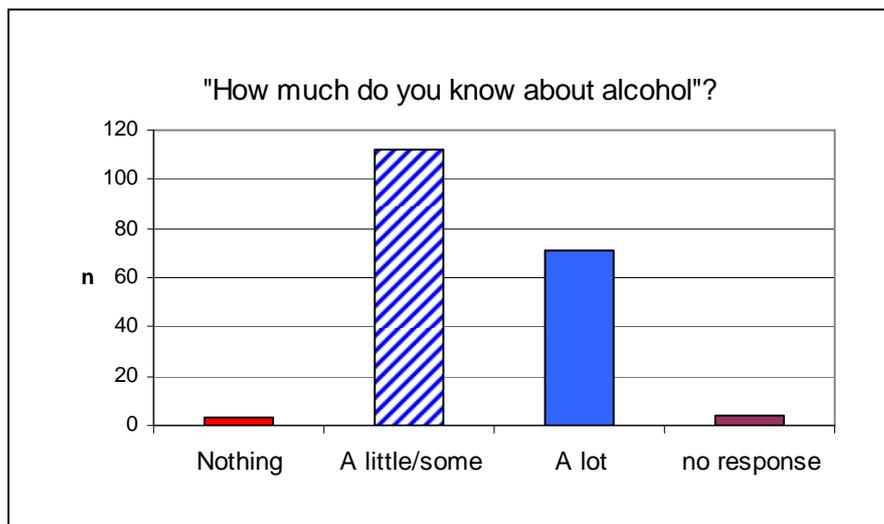


Figure 2a.

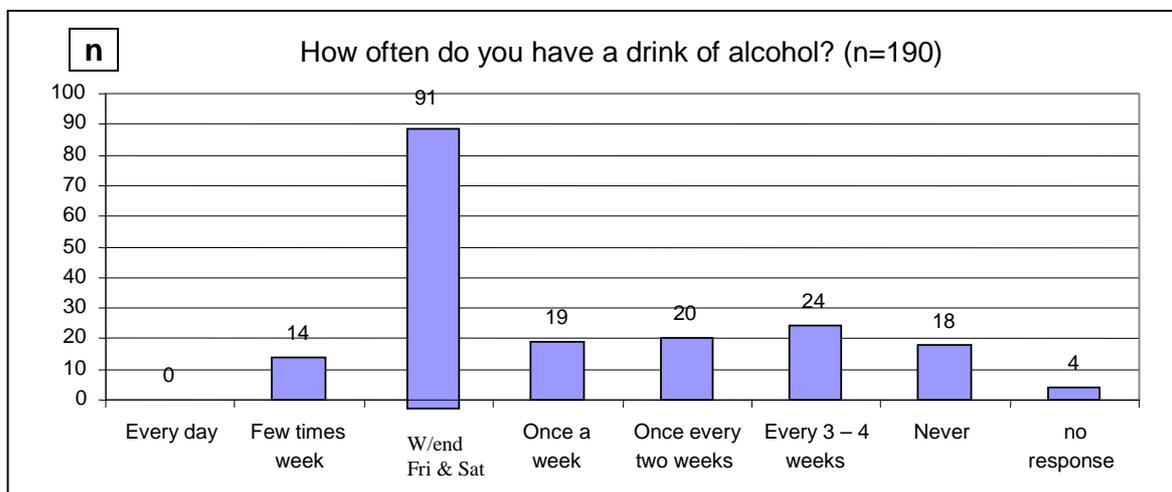
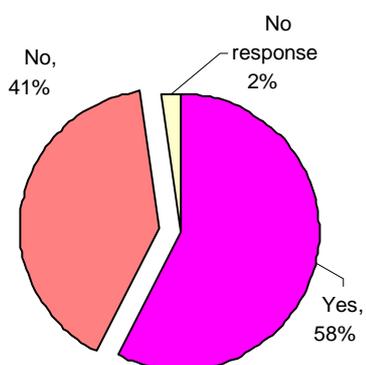


Fig 2b

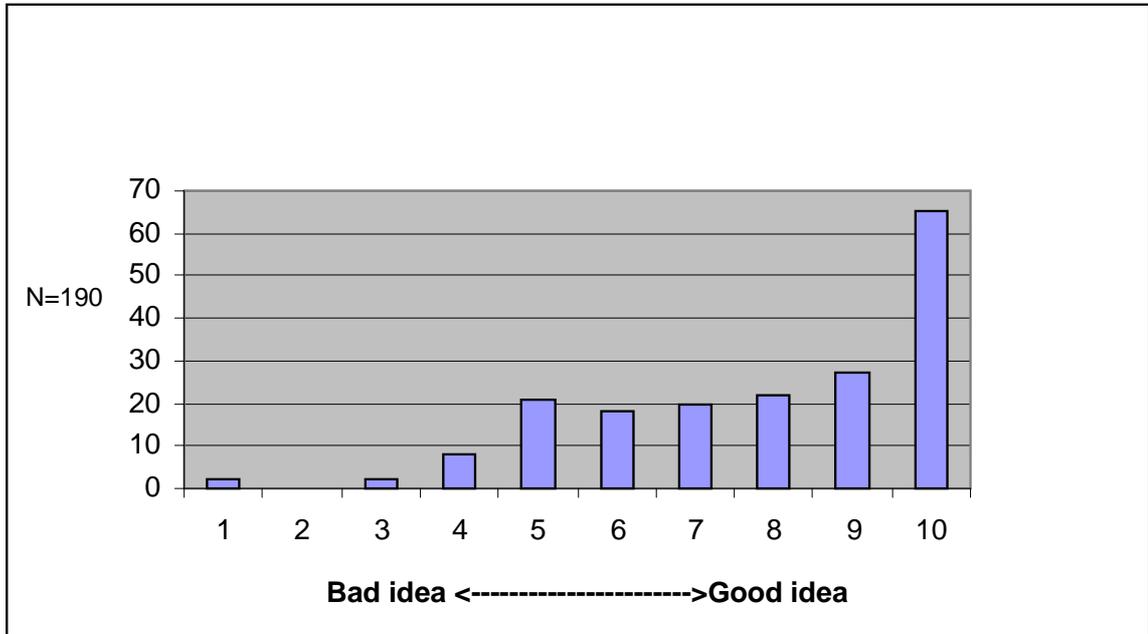
Would you know where to go if you wanted help, support or advice on alcohol?



- **"I think it is a good idea What yous are doing and it will help people my age."** Respondent aged 14
- **"Good Idea for some people who are maybe younger and don't understand the consequences of drinking!"** Respondent aged 16

Figure 2c.

What do you think of this idea? ( Alcohol quiz(screening tool) on Place clinic website )



## The Alcohol Screening Tool

There are a number of alcohol screening tools validated for use with young people: the TWEAK model (Tolerance, Worried, Eye-opener, Amnesia, and K/Cut down consumption) was thought to be most suitable for the clinic. This screening tool asks five questions about a young person's drinking. A score is weighted to each question depending on the answer. A score of three or more (up to a maximum of six) suggests a need for further assessment and would trigger the nurse to refer the young person for a brief intervention by the clinic alcohol and drug worker. The TWEAK screening tool takes approximately 3 minutes to administer and score.<sup>14</sup> The screening tool was designed for use with pregnant women and is superior to some models in identifying at-risk drinking, with 79% sensitivity and 83% specificity (that is it will correctly identify people drinking hazardously 79% of the time and wrongly identify people as drinking hazardously 17% of the time). A relational database was designed and placed on each clinic computer desktop, so staff could complete the screening tool in real time, with the participant present.

### Box 1. T.W.E.A.K. - Alcohol screening tool

<b>Criteria Scores</b>	<b>Scoring Tool</b>
How many drinks does it take before you begin to feel the first effects of alcohol?	(>=3 drinks) =2points
Have you friends or relatives worried about your drinking in past year?	(Yes) =1point
Do you sometimes take a drink in morning when you first get up?	(Yes) =1point
Are there times when you drink and afterwards can't remember what you said or did?	(Yes) =1point
Do you sometimes feel the need to cut down on your drinking?	(Yes) =1point
<b>Referral Indicator=</b>	<b>(&gt;=3 points)</b>

Initially all nurses at the young people's clinics planned to take part in administering the screening tool, referring young people with a high score on to the alcohol and drug worker for brief interventions. Unfortunately this model was not compatible with the demands of clinical practice and over the first six weeks of the screening pilot only 39 young people had been screened out of a possible 249 young people, and uptake of referral for brief intervention was low.

To improve recruitment, the alcohol and drug worker made herself available to screen young people as well as delivering the brief intervention. She approached young people who were waiting to be seen by the nurse and asked them if they would complete the screening tool while they waited. The majority of young people were happy to be approached and agreed to the screening after assurances they would not be kept waiting longer than necessary or miss their appointment with the nurse.

Although this approach was time-consuming for the alcohol and drugs worker, this new approach to recruitment proved much more effective, both increasing the number of young people screened and the likelihood of young people accepting brief intervention if they were eligible for it. This approach was also more acceptable to nursing and medical members of the team.

Throughout the three months of the pilot 472 young people attended the clinic, and 104 completed TWEAK screening (7 males, 7%). Their responses and scores are summarised below in figure 3.

Scores ranged from 0 to a high of 6, with a median of 3.

Ninety-one (88%) respondents said it took three drinks or more before they first began to feel the effects of alcohol. Seventy-one (68%) said they sometimes forgot what they said or did while drinking alcohol. Thirty-six percent said friends or relatives had worried about their drinking in the past year, but only 25% felt the need to cut down their drinking.

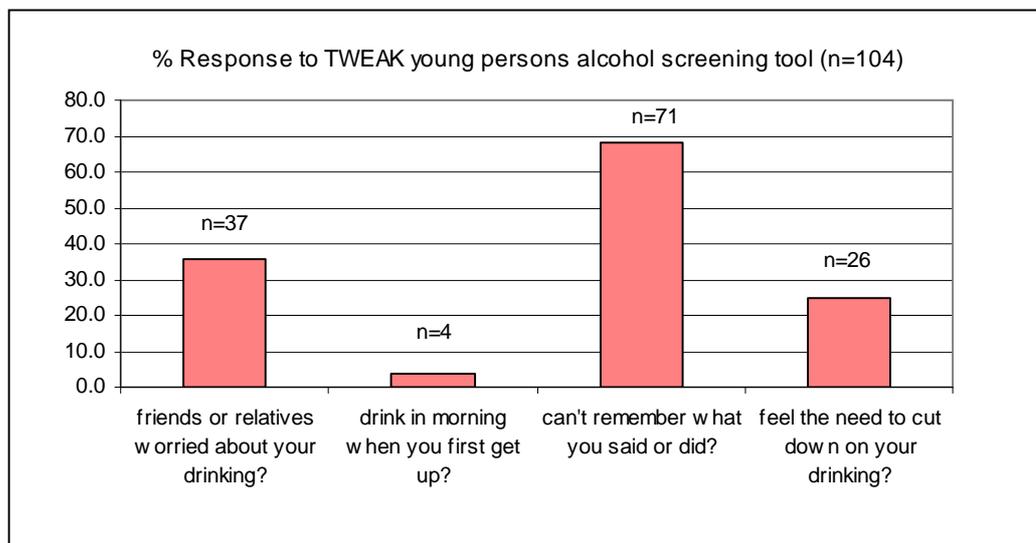
Seventy-seven young people (74% of all respondents) scored 3 or more (range 3-6, see figure 4 below) which suggested they were at risk of problem drinking and eligible for brief intervention.

- Twenty-seven (33% of those eligible for referral) declined the offer
- Fifty (65% of those eligible for referral, 48% of all respondents), accepted the offer of referral for brief intervention.

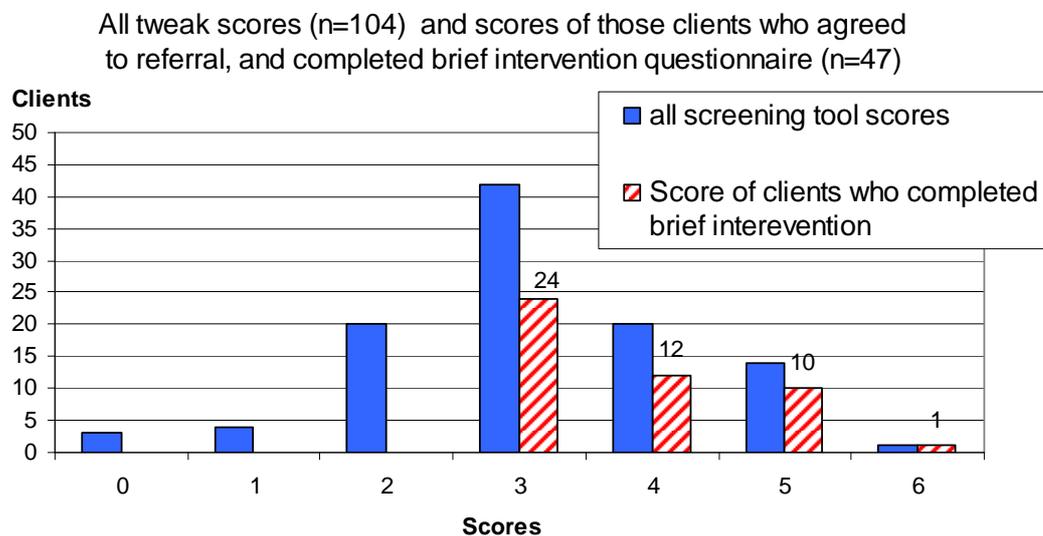
Of these 50, 47 clients had pre- and post-brief intervention questionnaires recorded.

In addition, 89 young people (86% of all respondents) were given an alcohol information leaflet at the time of the TWEAK screening. This proportion fell to 75% for the 77 respondents eligible for referral for brief intervention.

**Figure 3. Responses to TWEAK screening tool**



**Figure 4. TWEAK scores**



### Brief Intervention

50 young people initially agreed to be referred, but only 47 had brief intervention (the others could not wait to be seen by the alcohol counsellor). Pre and post intervention questionnaires were completed for these 47 young people.

#### Pre-brief intervention questionnaire

Before the brief intervention each young person was asked six questions by the alcohol and drugs worker (see figure 5 below). Several participants were unaware that alcohol was a drug. Several described accidents related to alcohol use.

A particular theme emerged of concerns about alcohol use in the young people’s families and some of the comments about this are included in figure 6.

The majority of participants (37 out of 47) were unaware of safe unit limits for alcohol. All of the young people who accepted brief intervention indicated that they would regularly binge-drink on a night out. “Binge drinking” is usually used to refer to heavy drinking over an evening or similar short time span - sometimes also referred to as heavy episodic drinking. Binge drinking is often associated with the intention of becoming intoxicated and with drinking in large groups. In the absence of DOH measurement of binge drinking the ONS (office for national statistics) definition of is 8 or more units for men and 6 or more units for women in on at least one day per week.

Forty-five young people (96%) answered that they knew how many drinks it would take before they felt the effects of alcohol. Of these 23 (49%) regularly drank vodka, with a range of ¼ bottle to 8 drinks before they felt the effects. Five (11%) regularly drank Buckfast, with a range of ½ bottle to 1½ bottles before the effects of alcohol were felt. The rest described a range of different drinks with most indicating 4-5 drinks before feeling the effects of alcohol. Cross-tabulation of results reveals that of the 16 young people “who find it difficult (or sometimes find it difficult) to stop drinking once they have started”, 9 (56%) felt they should cut down on their drinking and 11 had indicated in the TWEAK screening tool that in the past year they had friends who were worried about their drinking.

**Figure 5: Pre brief intervention questionnaire (n=47)**

<b>What is the recommended daily allowance of alcohol for your gender (units)?</b>	<b>N</b>	<b>%</b>
1-2	2	4
2-3	6	13
3-4	1	2
9-10*	1	2
Don't know	37	79
Total	47	100
<b>Do you know how many drinks before you begin to feel effect of the alcohol?*</b>		
Yes	45	96
No	2	4
Total	47	100
<b>How much would you drink on a regular night out (units)?</b>		
1-5	0	0
5-10	3	6
10-15	7	15
15-20	13	28
20-25	14	30
25-30	5	10
30-35	4	9
Not recorded	1	2
Total	47	100
<b>Do you find it difficult to stop drinking once you have started?</b>		
Yes	10	22
Sometimes	6	13
Never	30	64
Not recorded	1	2
Total	47	100
<b>Do you feel you should cut down on your drinking?</b>		
Yes	16	34
Sometimes	10	21
Never	20	43
Not recorded	1	2
Total	47	100
<b>Do you have a parent/ close friend whose drinking is worrying you?</b>		
Yes	20	43
No	26	55
Not recorded	1	2
Total	47	100

*\*possible answers with zero responses have been removed for brevity*

**Figure 6: Comments related to family drinking (at the time of pre-brief intervention questionnaire):**

- Boyfriend worries about her drinking, uncle and aunt both have drink problems
- Dad alcoholic, explained predisposition, dad stopped drinking for 7 yrs
- Dad binge drinks at weekends
- Dad had alcohol problem, and most of her dad's family have alcohol problem.
- Dad has drink problem
- Dad drank too much, twin brother drinking too much, worries about this - offered support
- Father has heroin problem
- Gran is a drinker. Family need to watch her as always sneaking drinks.
- Mum is a drinker
- Uncle and Granddad who had drink problem - no longer
- Uncle drug problem
- Uncle had drink problem
- Uncle is a drinker, has been told by her Gran to be careful as she has addictive personality
- Uncle who has drink problem.
- Worries about his mum's drinking, he gets violent, was offered support at the clinic, talks to his pal.

### **Brief Intervention**

The brief intervention delivered by the alcohol and drug worker aimed to provide support and information. The model used is the FRAMES model which lists six elements shown to be effective:

- **F**eedback - assessment of score results
- **R**esponsibility- ensure awareness of safe units and sensible drinking
- **A**dvice – tips on reducing alcohol and information on binge drinking
- **M**enu – coping strategies, exercise, information given on Young Scot card
- **E**mpathy – helpfulness of brief intervention,
- **S**elf efficacy – alcohol unit information, unit calculators and alcohol leaflets

Throughout the brief intervention information was given to each young person on how they scored. For example, as each had scored 3 or more on the screening tool, it was explained that this score suggested the young person would benefit from further information and advice on alcohol.

- Further in depth questions were asked depending on the answers to the screening tool. An assessment of what information and support might be needed was made by the worker.
- Information was given about how alcohol affects the body and on recommended safe units for men and women.
- Each young person was asked about drinking on a typical night out. The worker would calculate how many units were drunk, which was usually a shock to the young person
- Information was provided about what binge drinking is, what causes a blackout, and short and long term health risks associated with this behaviour.

Information about ways of coping with stress and problems was given along with tips on exercise (e.g. Young Scot card. Glasgow Young Scot Card provides free access to swimming pools offering discounts on leisure facilities, public transport and a range of services throughout

the city. The card is free to 12 – 18year olds attending school in Glasgow) and information on young persons' counselling and support services available.

- The dangers and risks associated with being drunk and vulnerable, including regretted and unprotected sex, sexual assault and rape, were discussed,
- Awareness of risk predisposition was raised with the young person if a history of family alcohol or drug problems was identified. Additional support was offered to young people who identified parental substance use.
- Each respondent was given alcohol unit calculator and "Cheers" alcohol information leaflet to take with them.

### Post Intervention questionnaire

A further eight questions were asked after the brief intervention was delivered (see figure 7 below). Most (94%) now knew the recommended safe alcohol units for their gender (compared to only 17%) before the brief intervention. Similar proportions found the information provided in the brief intervention had been helpful, felt more aware of the risks of binge drinking, and where to get help.

**Figure 7: post-brief intervention questionnaire results**

What is the safe number of daily units for your gender?	N	%
1-2	1	2
2-3	43	92
3-4*	1	2
Not recorded	2	4.3
Total	47	100

*\*possible answers with zero responses have been removed for brevity*

% Subjective response (n=47)	Strongly Agree	Agree	Disagree	Strongly Disagree	NR
I know how to keep myself safe with drink	15	72	2	0	11
The alcohol brief intervention has been helpful	49	47	0	0	4
It has made me aware of risks of binge drinking	53	43	0	2	2
I know how to get help	13	83	2	0	2
"The Place" is a good venue	19	57	0	0	23
The Quiz was informative	28	64	0	2	6
If feel I should cut down on drinking	2	45	36	0	17

## Discussion of findings

This pilot was a large undertaking, with several components that needed to be incorporated to make it work.

The pre-pilot **staff questionnaire** made it clear that although all staff had some awareness but lacked knowledge & confidence in dealing with alcohol issues. The training aimed to address that and increase knowledge and confidence. Evaluation of the effectiveness of this training was not formally done and this is a potential limitation of the study. If the screening tool is to be used more widely training of all staff including proper evaluation would need to be undertaken.

The pre-pilot **young people's questionnaire** showed a very low level of baseline knowledge about safe units for alcohol in adults (these units have not been deemed to be safe in people as young as our respondents). It confirmed that young people in our client group drink regularly and that they do not know where to go for information. This supported the idea that alcohol screening and brief intervention is appropriate in the sexual health setting.

The **alcohol screening tool** that was used (TWEAK) was selected because it was validated in young people, although in a different setting. Quality Improvement Scotland has recommended the use of another tool in emergency department settings but there is no recommendation for other settings. The value of this tool in the community clinic setting has not been tested.

Some questions seem to be of limited value in this setting; for example very few young people said they drank alcohol on first waking ('eye-opener'). The same number of young people would have been eligible for brief intervention if this question had been omitted. Also staff were concerned that as young people locally often drink direct from bottles or with 'home' measures rather than standard measures, it was difficult to be certain what constituted three drinks or more. This was addressed in the clinic by making available a list of commonly used drinks and the alcohol content in commonly sold amounts.

Although this screening tool should have been easy and quick to administer, the original plan to have the nurses administer it was not a success. The reasons for this need to be examined; there would be resource implications in having an additional member of staff on hand to do alcohol screening.

It may be that modifying the screening tool would make it more user-friendly without diminishing sensitivity and specificity, but this is beyond the scope of the pilot.

The **brief intervention** was found to be useful by almost all who completed it. A limitation is that evaluation was done immediately after the intervention; it would be useful in any future work to be able to test recall of information and perceived benefit some weeks or months after the intervention.

The alcohol worker found some unexpected benefits of the pilot, which were not able to be formally measured. In addition to the expected benefits of increasing awareness of alcohol and support available, and the personal satisfaction derived from that, she noticed that staff seemed more aware of her contribution, more likely to ask for information and to use her as part of the clinical team. She was struck by how open and receptive young people were to receiving information, and she became aware of how very little information about alcohol is specific to young people. She has now developed a new leaflet for young people, which is in production.

## **Implications**

While acknowledging some difficulties with the pilot and challenges in implementing alcohol screening to all young people attending our sexual health services, this pilot supports the idea that alcohol screening in this setting is feasible and would be acceptable and useful to young people. Sandyford will now examine how to make this a routine part of clinical practice for young people accessing our services.

Over the next few months we plan to train all staff in offering alcohol screening. In our setting, there is a regular multi-disciplinary teaching programme so training staff should be cost neutral, but there may be resource implications if consultation time is lengthened significantly and this would need to be examined. We would expect there to be an increase in referrals for brief intervention. The alcohol worker will look at how she can best support offering brief intervention to more young people within the constraints imposed by her current workload. It may be necessary to train some of the specialist sexual health nurses in brief intervention and this would have resource implications.

## **Acknowledgements**

Thanks to all the young people who participated in this pilot. Thanks also to the staff of the Place at Sandyford for their various contributions.