Prevalence of alcohol use disorders in Deaf psychiatric patients

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Abstract

Deaf people who use British Sign Language (BSL) as a first or preferred language are a recognised minority group in the UK. The body of evidence on Deaf people’s substance use is negligible. Clinicians working in a specialist psychiatric service for Deaf people, serving the south of England, surveyed the service’s caseload of Deaf psychiatric patients, using an alcohol screening instrument translated into British Sign language (The Alcohol Use Disorders Identification Test-AUDIT) to ascertain the prevalence of alcohol use disorders (AUD) amongst this group. Of 205 consecutive attendees n=144 took part; n=37 were excluded for not meeting criteria and n= 24 refused to take part. All subjects were given a brief written intervention for excessive alcohol use. Using an AUDIT cut off of 8, n=43 (29.9%) had an alcohol use disorders. Alcohol use disorders were commonest in males from white European backgrounds. There was no link with psychiatric diagnosis or age. N= 50 subjects who scored 6 or over on the AUDIT and n=52 who scored below 6 were interviewed with the Composite International Diagnostic Interview (CIDI). The AUDIT was found to be a reliable and sensitive instrument when crosschecked with the (CIDI) (92.2% correctly classified by AUDIT as having alcohol dependency; 4 false positives and 4 false negatives). Those reporting an AUD had a significantly worse EQ5D total than those who did not have an AUD. Of 18 subjects who had AUDIT scores of 8 or more, followed up in routine out patient appointments, 4 had significantly curtailed their alcohol intake, suggesting brief interventions for alcohol use may be useful in a Deaf population.

Introduction

Deafness (a severe to profound hearing loss) is common, occurring in around 1 per 1,000 of the population. There is a subgroup of about 75,000 people, mainly pre-lingually deaf, who are British Sign Language (BSL) users and who think of themselves as being part of the Deaf community and Deaf Culture (Department of Health, 2002a). The research population for this study comes from this community where being (D)eaf ‘refers more to membership of a particular linguistic and cultural grouping than it does to the physical condition of deafness’ (Brennan, 1992).

The National Deaf Service provides a mental health service to Deaf people across the southern third of England. It provides assessment and treatments in BSL, taking into account cultural factors.

In recent years there has been increasing research activity into the substance use patterns of different ethnic and cultural minorities (Westermeyer, 1995). Emphasis has been placed on the importance of socio-cultural factors impacting upon prevalence, incidence, pattern and course of alcohol use disorders. It seems probable that cultural factors can impact on Deaf people’s patterns of alcohol use. Deaf people, for example, share a history of discrimination against, and proscription of, their
alcohol consumption in public bars and clubs (‘blanket bans’ on members of a particular groups) with other minorities, such as Gypsies (Morris, 2001) and the gay community (John and Patrick, 1999). Deaf people are also vulnerable to risk factors, such as poverty and social exclusion (Davidson, 2004), which have been, linked to an increased risk of substance use disorders in the general population (Home Office, 1998). There are also concerns those developmental factors for Deaf people may impact on their susceptibility to a range of disorders, including substance use disorders (Whitehouse et al, 1991).

There has been some interest in alcohol use in the Deaf population. Two studies found no difference in rates of alcohol disorders between Deaf and hearing people. Isaacs, Buckley and Martin (1979) compared alcohol use in 39 white Deaf men with data from two comparable non-Deaf samples and found no significant differences between the Deaf and non-Deaf samples in patterns of alcohol consumption. Similarly, a survey of drug and alcohol use amongst New York City’s Deaf population suggested Deaf people experience similar drinking use patterns to the general population (Lipton and Goldstein, 1997).

In Strathclyde a small survey of caseloads of social workers for Deaf people identified 39% of women and 54% of men as having an alcohol problem. These numbers were double the figures for general social work cases in the West of Scotland (Crawford, 1998).

In the UK 236 Deaf adults were interviewed about a range of health related issues including alcohol use (Dye, 2000). 22% of Deaf men and 24% of Deaf women were found to drink above the recommended weekly intake of alcohol. Deaf women were almost twice as likely to drink dangerous levels of alcohol as hearing women, with 43% of those on higher incomes drinking above the recommended limits. Deaf men aged 18-24 drank the most with the average weekly intake being over 30 units.

There have not been any studies of alcohol use in Deaf people with mental illness. Studies have consistently found high rates of alcohol use disorders in psychiatric patients (Reiger et al, 1990; Department of Health, 2002a).

We aimed to:

1. Ascertain the prevalence of alcohol use disorders in people who are Deaf and have a psychiatric illness.
2. Compare the prevalence of alcohol use disorders obtained in a Deaf population with that in a hearing population by adapting the methodology, which has been used in previous alcohol prevalence studies in the hearing population, for use with a Deaf population.
3. Establish the sensitivity and specificity of the AUDIT tested against the CIDI in a Deaf adult population
4. Educate Deaf psychiatric patients about alcohol. The evidence from the literature is that giving patients advice and information about alcohol is an effective way of gaining a reduction in hazardous alcohol consumption (Anderson, 1996).
5. To draw comparisons with other research findings on alcohol use disorders by analysing putative relationships between alcohol use disorders and other variables
which previous research has found to be notable. The other variables are age, sex, ethnicity, psychiatric diagnosis and Health Related Quality of Life.

STUDY METHODOLOGY

1. Definitions

Alcohol use disorders were defined according to ICD 10 (WHO, 1993) as; hazardous use, harmful use and alcohol dependence.

Hazardous use is a level of drinking likely to cause harm to the individual. Harmful use is a pattern of alcohol use, which has already caused damage to health, either physical or mental, but does not meet the criteria for dependence.

A diagnosis of dependence is made if at least three criteria are present during the past 12 months, ranging from withdrawal, impaired control of drinking, and use despite harmful consequences to health.

2. Study Population

All patients attending the National Deaf Service (NDS) over a 12-month period were invited to take part in the study. Patients were given information about the study and their consent sought. We produced a BSL video about the study and consent. The study had ethical approval from our local Ethics Committee. Subjects were also given information about alcohol. Inclusion criteria were: patient of NDS, able to give informed consent and aged over 18yrs. Exclusion criteria were: not able to give informed consent, not patient of NDS and not aged over 18yrs.

3. Questionnaires

If patients consented the AUDIT questionnaire (Alcohol Use Disorders Identification Test) and the EuroQol(EQ-5D) questionnaire were administered. All patients who scored over threshold on the AUDIT were asked to complete the CIDI (Composite International Diagnostic Interview) section on alcohol use. We aimed to also complete the CIDI alcohol section on at least 50 patients who scored below threshold on the AUDIT. These patients were to act as controls to test the specificity of the BSL version of the AUDIT.

(i) The AUDIT

This 10-item questionnaire was developed by the World Health Organisation (WHO) and designed to be a screening instrument for use internationally (Babor and Grant, 1992). Sensitivities and specificities of the AUDIT for criteria of current hazardous use and lifetime alcohol dependence are high (Allen et al, 1997). Indices of internal consistency, including Cronbach’s alpha and item-total correlations, are generally in the 0.08’s (Allen et al, 1997).

Internal consistency, reliability and validity have been found to be satisfactory in terms of sensitivity and specificity in predicting DSM (Diagnostic and Statistics Manual) alcoholism diagnoses (Bergman et al, 1998).
It has been found to be a reliable and effective screening instrument across different cultures, languages, ages, sexes, social classes and races. (Bradley et al, 1998; Volk et al, 1997; Cherpitel, 1998; Claussen, 1999; O’Hare and Sherrer, 1999; Aertgeerts et al, 2000; Thom et al, 1999; Reid et al, 2000).

It has been used to screen hospital patients (Canning et al, 1999; Lapham et al, 1999; Thom et al, 1999), and more specifically psychiatric patients (Bergman et al, 1998).

(ii) The CIDI
The CIDI was developed by WHO. It is a fully structured interview that maps the symptoms elicited during the interview on to DSM-IV or ICD 10 (International Classification of Diseases) diagnostic criteria and reports whether the diagnostic criteria are satisfied (Andrews and Peters, 1998). The inter-rater reliability, test re-test reliability and the validity have all been demonstrated to be good (Andrews and Peters, 1998; Ustun et al, 1997). We used the 12 month version.

It is designed for use in different cultures and languages and is available in many languages. It has been found to be reliable and valid across different languages and cultures (Horton, Compton and Colter, 2000; Kebede, Alem, 1999; Hall, 1999).

The CIDI has been used to screen hospital populations in conjunction with the AUDIT (Arolt and Driessen, 1996).

(iii) The EuroQol-EQ-5D Questionnaire
This is a generic self-report measure of health status developed by an international research group (EuroQol Group). It is simple to use and can be administered in 2 to 3 minutes. The questionnaire defines health in terms of five dimensions: Mobility, Self-Care, Usual Activities (work, study, housework, family or leisure), Pain or Discomfort, and Anxiety or Depression.

Each dimension is divided into three categories, which indicate whether the respondent has no problem, a moderate problem or an extreme problem. Combinations of categories define a total of 243 health states. Health states can then be weighted to calculate a single score ‘Tariff’ for an individual’s health status.

On the first page respondents record their perception of their health in each of the five dimensions. On page two respondents rate their current perception of their overall health on a visual analogue scale (e-Q VAS) - between 0 (worst imaginable health state) and 100 (best imaginable health state). The EQ-5D can be used to measure population health status, assess differences in subgroups of the population, or to monitor and assess clinical inputs and outcomes in various treatment populations and conditions (EuroQol Group, 2000).

The EQ-5D has been found to be valid and reliable (Essink-bot et al, 1997). Health Related Quality of Life (HRQL) norms have been identified in the UK population in a national survey (Kind et al, 1998).

EQ-5D has been translated into over 30 different languages and is suitable for use in different cultures (EurQuol Group 1997). It has been used to study HRQL in alcohol dependent subjects (Foster et al, 1999) and psychiatric patients (Dernosek et al, 2001).
4. Adapting the Questionnaires for use in a Deaf population

As AUDIT, EQ-5D and CIDI have been found to be valid instruments across different languages, cultures, sexes, ages and educational backgrounds, it seemed reasonable to assume they would be useful instruments in a Deaf population.

(i) Feedback from Deaf mental health professionals and BSL interpreters

Initially the questionnaires were circulated to Deaf staff and BSL interpreters working in the NDS. We asked them to try and fill in the questionnaires and to feedback to us any problems they had or that they thought our Deaf patients would have with either the language or the concepts in the questionnaires. Deaf staff found the EQ-5D in particular easy to understand and fill in. The AUDIT and CIDI Deaf staff found more difficult and advised us against allowing patients to fill them in unsupported. The paper and pencil version of the CIDI was generally felt to be unsuitable for Deaf patients. It asks the respondent to skip through to different questions according to their response and this was felt to be too complicated. Some of the English in the CIDI questionnaire was felt to be too long, complicated (for example the word ‘beverages’ is used) and not ‘Deaf friendly’.

(ii) Back translation

Back translation is the technique of translating English assessment instruments into BSL via one interpreter and then a second independent interpreter translates them back to English. The back-translated version is compared to the original. It has been used a lot in research in the Deaf population (Hindley et al 1994) It has been used to adapt questionnaires in hearing populations too, for example, Leung and Arthur (2000), translated the AUDIT into Chinese and then back translated it to confirm the equivalence of Chinese and English versions. They then administered the questionnaire to 450 subjects. They found the AUDIT to be reliable and valid in Chinese cultures (Leung and Arthur, 2000). This is of note because of the marked linguistic and cultural differences between Chinese and English, which have parallels in the differences between BSL and English.

We made a BSL video of the AUDIT using number of different interpreters working with Deaf staff who were involved in this project. The interpreters all had experience in mental health. The Deaf staff picked the clearest translations and a final video version was compiled. They were then back translated, using independent sign language interpreters and Deaf staff to confirm the equivalence of BSL and English versions. This video was designed to teach staff to administer the questionnaire and was not used to administer the questionnaire.

With the CIDI, where the respondent is asked to skip through to different questions according to response, it would be difficult to produce a video. In view of all of this signing psychiatrists, Deaf staff and sign language interpreters went through the questionnaire and carefully considered how best to sign each question. The consensus was that a consultant psychiatrist, fluent in BSL and trained in how best to sign each question by Deaf staff and interpreters, should only administer it.
Using the questionnaires

BSL video versions were made of the information about the study, consent to the study and AUDIT questionnaire. The Deaf and hearing staff received training in administering the AUDIT, EQ-5D, CIDI, information and consent.

The respondents were either shown the AUDIT videos in the presence of the Deaf staff or interviewed directly by a signing psychiatrist. The EQ-5D questions were signed to the respondent either by Deaf staff or a signing psychiatrist. All study participants were offered a choice of visual and written information on sensible alcohol consumption.

The CIDI (CIDI 2.1) was be administered by a signing psychiatrist trained by Deaf staff and interpreters in signing the questions.

5. Statistics

Windows SPSS (version 11.5) was used for analyses. Chi square tests were used to examine the association between demographic variables, age, ethnicity, psychiatric diagnosis, sex and health related quality of life, and AUDs. A discriminant function analysis was used to examine how adequately the CIDI classification of Alcohol Disorder could be predicted from the AUDIT score.

We hoped to recruit 250 patients. If the prevalence of AUD in psychiatric patients is 20% we would require 250 patients to give a 95% confidence interval of width + or – 5% (i.e. confidence interval from 15% to 25%).

We used a threshold score in the AUDIT of 8 (maximum score =40) because previous studies have found at this score the sensitivity is 92% (range 87% to 96%) and the specificity is 92% (range 81% to 98%) (Conigrave, Hall and Saunders, 1995). We discussed the possibility of missing cases (false negatives) using this cut off score with the statistician and were advised to take 50 subjects who scored above and below a cut off score of 6 and interview them with the CIDI.

RESULTS

Demographics

205 consecutive attendees at the NDS were invited to take part in the study. These were all outpatients, some but not all were on the community team’s caseload. N= 24 refused to participate in the study and N= 37 were excluded for not meeting the criteria. A total of 144 subjects participated in the study and n=102 were screened with the CIDI
Age
55% (78) were male and 45% (64) were female. The mean age of the sample was 40.5 years, with a range from 18-91 years (standard deviation 12.3). 36.8% of the sample were between 18-35, 43% between 36-50 and 20.1% above 50 years of age.

Ethnicity
Information on ethnic background was obtained from case records. Eighty-four (58.3%) of the sample were white British. A further 20 (13.9%) were from other white backgrounds. 23 (16%) were black British, Afro-Caribbean, black African or black other. Eight (5.6%) were Indian or Asian, and 7 (4.9%) from mixed backgrounds.

Psychiatric Diagnosis
Psychiatric diagnosis was made according to ICD10 categorisation. Diagnosis was grouped into alcohol/substance misuse disorders, psychoses, mood disorders, neuroses, and behavioural and learning disability categories. The majority of the sample were diagnosed as having psychotic (43.8%) or mood disorders (33.3%). Prevalences of other diagnoses were: Alcohol/substances misuse (4.9%), neuroses 2.8%, behavioural 7.6% and learning disability 1.4%.

1. audit

All 144 subjects completed the AUDIT questionnaire. AUDIT scores (maximum 40) ranged between 0 and 31. Mean sample score was 6.72 (sd 8.41). Consistent with results in other populations, thirty four percent of subjects scored 0, indicating abstinence from alcohol.

A cut-off of 8 provides sensitivities in the 87-96% range and specificities in the 81-96% range.

At ≥ 8, 43 (29.9%) of the sample scored positive for an AUD.

2. Association between demographic variables, age, ethnicity, psychiatric diagnosis, sex and health related quality of life, and AUDs were examined.

(i) Age

For purposes of clarity in cross-tabulation results, age was divided into categories 18-35 and 35+.

Table 1 shows the relationship of AUDIT scores to age categories.

<table>
<thead>
<tr>
<th>AUDIT SCORE</th>
<th>&lt;8</th>
<th>≥8</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-35</td>
<td>67.8% (n=78)</td>
<td>32.2% (n=37)</td>
</tr>
<tr>
<td>35+</td>
<td>79.3% (n=23)</td>
<td>20.7% (n=6)</td>
</tr>
</tbody>
</table>

A chi-square analysis showed no significant differences between AUDIT scores and age categories (χ² = 1.458, df =1, p = .164). Trends in AUDIT scores appear to be
similar across age categories. There does not therefore appear to be a prevalence difference in AUD by age – maybe because of the sample size differences ie: 115 of the sample were in the 18-35 category and only 29 in the 50+ category.

(ii) Ethnicity

Due to the small prevalence of non-white categories, ethnicity was divided into white (72.2%) and non-white (26.5%).

Table 2 shows AUDIT scores by Ethnic group

<table>
<thead>
<tr>
<th>AUDIT SCORE</th>
<th>&lt;8</th>
<th>≥8</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>67.3% (n=68)</td>
<td>32.7% (n=33)</td>
</tr>
<tr>
<td>Non-white</td>
<td>83.7% (n=36)</td>
<td>16.3% (n=7)</td>
</tr>
</tbody>
</table>

A chi-square test was performed to look for associations between AUDIT scores and ethnicity. There was a significant difference in the prevalence of AUD by ethnicity ($\chi^2 = 4.041$, df = 1, p < .05). White subjects were significantly more likely than non-white subjects to have an AUD.

(iv) Psychiatric Diagnosis

Due to the large proportion of subjects with diagnoses of psychosis, subjects were grouped into psychoses and ‘other’ categories, with prevalences in this sample of 43.8% and 50% respectively. Nine (6.3%) subjects did not have a clinical diagnosis in their case notes and were therefore excluded from analyses.

An initial chi-square test revealed a significant difference between AUDIT scores of subjects. Those with a diagnosis of psychoses showed significantly less chance of reporting an AUD than those with other psychiatric diagnoses ($\chi^2 = 4.149$, df=1, p<.05). Further investigation though, yielded that these results were due to the inclusion of those with alcohol/substance misuse disorders in the ‘other’ category. Exclusion of these subjects, showed that there were no significant differences in AUDIT scores by psychiatric diagnosis ($\chi^2 = 1.808$, df =1, p=.127).

(v) Sex

Prevalence of AUDs is generally known to vary by gender. Results were analysed to determine if these difference occurred in the current sample.

Table 3 shows prevalences of AUDIT scores by gender.

<table>
<thead>
<tr>
<th>AUDIT SCORE</th>
<th>&lt;8</th>
<th>≥8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>64.1% (n=50)</td>
<td>35.9%(n=28)</td>
</tr>
<tr>
<td>Female</td>
<td>78.1% (n=50)</td>
<td>21.9% (n=14)</td>
</tr>
</tbody>
</table>
A chi-square analysis showed expected gender differences, with males being significantly more likely to have an AUD than females ($\chi^2 = 3.319, df = 1, p = .05$).

3. CIDI

Scores greater than 3 on the CIDI are said to indicate alcohol dependence. In the present sample 102 out of the 144 subjects completed the CIDI. Seventy-four (51.4%) scored 3 or under and 28 (19.4%) should be percentages of those who completed questionnaire scored over 3, therefore fulfilling the DSM-IIIR criteria for alcohol dependence.

Comparing this with AUDIT scores distribution (using 8 as a cut-off for AUD) then 101 subjects (70.1%) did not show AUD as measured by the AUDIT and 43 (29.9%) could be classed as exhibiting an AUD.

A direct discriminant function analysis was performed to investigate how adequately CIDI classification of alcohol dependence could be predicted from AUDIT scores.

Of the original 144 cases, 102 were tested were tested with the CIDI. This analysis therefore used the sample of 102 subjects who had completed the CIDI. Assumption of linearity, normality, multicollinearity or singularity and homogeneity of variance-covariance matrices showed no threat to multivariate analysis. The relationship between CIDI and AUDIT scores was in the expected direction.

A single discriminant function was calculated with a $\chi^2 (1) = 98.38, p<.001$. This function accounted for 79.2% of the between group variability. Those diagnosed as not having an alcohol dependency (CIDI) scored an average of 4.23 on the AUDIT (sd 5.194) whereas those diagnosed as alcohol dependent showed an average of 20 on the AUDIT (sd 6.158).

From knowledge of AUDIT scores 92.2% of subjects could be correctly classified as having a diagnosis of alcohol dependence or not. Of the 7.8% that were incorrectly classified there was an even distribution of false positives and false negatives (4 subjects each).

4. HRQL

140 subjects completed the EQ-5D questionnaire, 137 also completed the EQ-VAS. EQ-5D mean for the sample was 0.652, (sd= 0.292).

Percentages of respondents reporting a moderate or a severe problem on each of the 5 categories are shown below. Percentages in brackets are UK general population norms obtained using EQ-5D from a national survey (n=3995) by Kind et al (1998).

1. Usual Activities
   ‘Some problem’ performing usual activities 24.1% (14.2%)
   ‘Unable to perform usual activities’ 7% (2.1%)

2. Mobility
   ‘Some problem walking about’ 20.6% (2.1%)
‘Unable to walk about’ 7% (0.1%)

3. Self Care
‘Some problem with washing and dressing’ 36.2% (4.1%)
‘Unable to wash or dress’ 3.5% (0.1%)

4. Anxiety/ Deprerr
‘Moderately anxious/ depressed 43.3% (19.1%)
‘Extremely’ anxious/ depressed 7.8% (1.8%)

5. Pain/ Discomfort
‘Moderate pain/ discomfort’ 52.5% (29.2%)
Extreme pain/ discomfort 10.6% (3.8%)

The mean EQ-VAS score for the sample was 58.91 (sd 22.67). The mean score identified by Kind et al (1998) was 82.5 (sd 17). EQ-VAS scores are significantly positively correlated with EQ-5D totals.

5. HRQL and AUDs

Data was analysed to compare HRQL for respondents who had AUDs to those who did not. A comparison of EQ5D scores for those who are positive for AUD (AUDIT score of 8 or more) versus those who did not have an AUD (n=98) revealed a significant difference between the means (t=2.496, df 138, p=0.014). Those reporting an AUD had a significantly worse EQ5D total than those who did not have an AUD.

AUDIT <8 EQ5D mean 0.731, sd 0.266
AUDIT > or + 8 EQ5D mean 0.599, sd 0.331

6. Impact of giving information on alcohol

18 of the subjects who had AUDIT scores of 8 or more were followed up in routine outpatient appointments; 4 had significantly curtailed their alcohol at the follow up appointment after they were given the information on alcohol ( three had reduced their weekly intake to within recommended limits and one had become abstinent).

DISCUSSION

We had aimed to screen 250 patients. We had not realised that so many of the patients of our service would be unable to take part because communication difficulties, from learning disability or other communication disorders, would lead to their being excluded. In adapting the questionnaires we committed to face-to-face administration, which meant we could not include more distant patients of the service unless they attended our unit, or one of the research team visited them in the community as part of normal practice. We considered a number of ways of increasing our number of participants (postal questionnaires, involving other sites for mental health and
Deafness) but we were concerned these would impair validity. Postal questionnaires would have been contrary to the advice we received from Deaf professionals and interpreters on administration and previous research findings on response rates (Schroedel, 1984). Involving other sites would have extended the time period of the study unacceptably and introduced other variables (for example regional variations in BSL and in alcohol prevalence, ensuring inter-rater reliability). The population of Deaf people with mental illness is likely to be relatively small, given there are 50 to 70,000 Deaf people in total, and so obtaining large samples will always present a problem. Our power calculation was based on a prevalence of AUDs of 20% in a hearing psychiatric outpatient population, but the prevalence in the hearing population equivalent to our study population may be higher, as discussed below, and therefore our study may have greater power with smaller numbers than we had previously thought.

We found the AUDIT was valid and user friendly and correlated strongly and positively with CIDI. AUDIT scores were highly predictive of CIDI categorisation.

The overall prevalence of AUDs (29.9%) was greater than that previously found in the ‘general’ Deaf population (Dye and Kyle 2001). This is an expected finding in that rates of AUDs are known to be greater in dual diagnosis population than in the general population with a higher prevalence among people with mental illness (Rachheisel et al, 1999).

In mainstream community mental health teams the average prevalence of SUDs is between 8% and 15% (Department of Health 2002) suggesting a higher prevalence in Deaf people with mental illness. Our sample was of outpatients and community team or assertive outreach team patients. Some of the patients were admitted at points in the study period although they were not inpatients when they completed the questionnaires. Psychiatric inpatients do have higher rates of AUDs, for example Barnaby et al, 2003, finding a prevalence of 49%.

Our service is also a tertiary service and not a secondary CMHT. Our patients, in addition to Deafness, end to have more complicated presentations with additional disabilities health problems or more complicated and resistant psychiatric disorders being common (Kitson and Thacker, 2000). The general severity of mental health problems in patients referred to a tertiary specialist service may account for us not finding any association between mental illness severity and AUD as has been found in previous studies (Department of Health, 2002). Other studies have found strong associations between physical and mental health problems and substance misuse in mental health patients (Alaja et al 1997). It is possible that these factors, present in our study population, acted both to increase the prevalence of AUDs and to make our study population different from the usual population of a community psychiatric team.

Our sample was mostly young and this is probably why no difference found for age in terms of prevalence. There were significantly more males and white people with AUDIT scores over 8. This is in keeping with the literature and suggests that the patterns of SUD in the Deaf population mirror that in the general population (Department of Health, 2002).
HRQL was found to be poorer than general population norms across the 5 indices in the EQ5D and on the EQ-VAS. Additionally Deaf subjects with AUDs had significantly poorer scores than Deaf patients without AUDs. The finding that Deaf subjects have poorer quality of life is noteworthy, but perhaps not unexpected in a population of psychiatric patients. Unfortunately no data exists about HRQL in the non-Deaf psychiatric population which would enable meaningful comparisons to be made; so presently we cannot investigate if Deaf subjects’ poorer HRQL is associated with being Deaf, psychiatric morbidity or a combination of related factors.

It was perhaps unexpected to find a statistically significant association between AUDs and poorer HRQL as most of the existing evidence on poorer HRQL relates to alcohol dependent subjects (Foster et al, 1998). This finding raises an important question; if subjects are starting with a lower base of HRQL are they more susceptible to greater morbidity or more rapid onset of morbidity related to AUDs than the general population?

Our finding that simply administering the AUDIT, and providing information about alcohol use to subjects, could have a beneficial impact is a welcome one and offers hope that relatively simple, easy to use and cost effective interventions could be made available to Deaf people. It should be cautioned however that our findings were anecdotal- following up the effects of the information giving was not part of the original study design. Carefully designed formal empirical evaluation of the use of ‘brief interventions’ with Deaf people would be required to draw firm conclusions in regards to this area.

Results strongly suggest AUDIT is a valid useful tool for assessing Deaf peoples alcohol use, as long as the communication needs of the individual subject are accurately identified and catered for in the AUDIT administration.

Our use of the AUDIT revealed AUDs in individual subjects, where previously they had not been identified (despite, in a number of cases, regular clinical review). The AUDIT, therefore, enhanced clinicians’ ability to accurately identify clinically significant AUDs and Dual Diagnosis issues. We would recommend that clinicians working with Deaf people with mental illness routinely employ AUDIT to screen for AUDs.

The AUDIT appears to be an effective screening instrument for Deaf psychiatric patients so it may be of equal value when assessing alcohol use of Deaf people generally and may be of use in primary care settings or Accident and Emergency services. This is a possible area for further research.

The most salient finding in this study for those of us who work with in the field of mental health and deafness is that there was a significant proportion of people with AUD’s- established through use of a established alcohol screening instrument (much of the evidence base on deaf peoples’ alcohol use has tended to be anecdotal and/or has encountered insurmountable methodological difficulties). This means that thought needs to be given to adapting treatment strategies to this group and to making sure Deaf people have the same access to early intervention and preventative strategies as the rest of the population.
Finally in carrying out this research the researchers did identify a recurring theme around Deaf people’s incidental learning and experiences of alcohol use. We suspect this is of real importance in understanding the development of AUDs in Deaf people and planning interventions. We would suggest that qualitative work in this area would be essential to underpin the development of effective interventions for Deaf people.

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