TREATMENT

Is It My Job? Alcohol Brief Interventions: Knowledge and Attitudes among Future Health-care Professionals in Scotland

Jan S. Gill* and Fiona P. O'May

School of Health Sciences, Queen Margaret University, Edinburgh EH21 6UU, UK
*Corresponding author. Tel.: +44-131-474-0000; Fax: +44-131-474-0001; E-mail: jgill@qmu.ac.uk

(Received 3 February 2011; in revised form 20 April 2011; accepted 20 April 2011)

Abstract — Aims: To document knowledge and perceptions relating to the professional role in the area of alcohol misuse within a sample of first year (n = 278) and final year (n = 527) medical, nursing and allied health professional (NAHP) students in Scotland. Methods: A cross-sectional survey design involving self-completed questionnaires administered in autumn 2008 (first year students) and spring 2009 (final year students) through course websites and lectures. Results: Gaps in the knowledge relating to current UK health guidelines were identified but more so among NAHP students than medical students. Exploration of the perceived role in this area of practice identified three broad groups of students: those clear about their role (medical and nursing students), those advocating a role but not identified by fellow students (occupational therapy and pharmacy) and those uncertain of their role (radiographers, speech and language therapists/audiologists and physiotherapy). Conclusions: Higher education institutions should address the gaps in the knowledge around guidance for alcohol consumption. The effectiveness of brief interventions may depend on it. Additionally, through inter-professional teaching and in collaboration with the relevant professional bodies, more could be done to promote the contribution of practitioners other than those traditionally linked (i.e. medical and nursing) to this important clinical role.

INTRODUCTION

Alcohol consumption among Scots is the eighth highest in the world (Scottish Government, 2009a). Statistics document the consequences; alcohol is linked with 11% of all hospital emergency attendances in Scotland and is the ‘underlying cause’ of 5.0% of deaths (Information Services Division, 2009a). In 2007, alcohol-related health service costs accounted for £268 million with the overall cost of alcohol misuse in Scotland estimated at £3.56 billion (Scottish Government, 2010a; ~2.6% of Gross Domestic Product; Scottish Government, 2010b).

Potentially hazardous drinking is not restricted to those individuals consuming conspicuously harmful amounts (e.g. ‘binge drinking’), but is a characteristic of the drinking pattern of many UK adults across the age range. Scottish adults have a relatively poor grasp of both their own alcohol consumption and of the content of key alcohol-related health messages (Gill and O’May, 2006, 2007a; Bromley et al., 2010). It may therefore be necessary to modify the drinking of many to realize the desired and targeted improvement in health and health-related costs. The Scottish Government (2009b) has implemented a comprehensive, continually reviewed, evidence-based, resourced alcohol policy; the scene-setting report, incorporating baseline data, has recently been published (Beeston et al., 2011). One strategy was the establishment of a target for the delivery of alcohol brief interventions (ABIs; short motivational interviews with patients, in which costs and benefits of drinking are discussed), along with information about health risks (Scottish Government, 2009b, 2010c). NHS Health Scotland set a HEAT (Health Improvement, Efficiency, Access, Treatment) target in relation to alcohol: almost 150,000 ABIs were to be delivered within Scotland by 2011 (Scottish Government, 2009b).

Accumulating evidence suggests that ABIs delivered by medical or public health practitioners may be cost effective (Lock, 2004; Kaner et al., 2007, 2009; PHEPA, 2009), and indeed are advocated by the WHO (2010) for use by health services and health practitioners as part of their global strategy to reduce harmful alcohol use.

Traditionally, the remit for the delivery of ABIs and health promotion in this key area of public health has been ascribed to nursing and medical staff. Recent publications, however, argue for the importance of the role of other front-line health-care professionals (Watson, 1999; Lock, 2004). For example, the College of Occupational Therapists presented written evidence to the Alcohol Commission in Scotland (a working party established in 2010 by the Labour Party to consider alcohol policy issues) and also to the policy review ‘Working together to reduce harm: the substance misuse strategy for Wales 2008–2018’ (Crowder and Forster, 2008). In this latter paper, the authors suggest that in the area of prevention ‘there is no mention of the important contribution that occupational therapy can make’ and that they ‘could contribute far more than is currently the case in preventing addictive behaviour developing in the first place’ (p. 2). Also relevant is Alcohol Identification and Brief Advice (IBA) e-learning, a new online Pharmacy course pathway whereby professionals can obtain free training on how to deliver simple IBA in a pharmacy health-care setting (Alcohol Learning Centre, 2010).

These developments, promoting a blurring of professional boundaries, are in line with current policy changes which impact on NHS working practices; flexible, collaborative working patterns for health professionals have been endorsed (Department of Health, 2000, 2001; Scottish Executive, 2002, 2003). Additionally, the publication of the action plan ‘Better Health Better Care’ (Scottish Government, 2007) advocates a model of care which is embedded in communities and, crucially, is team-based and integrative in approach.

Justifiably, these policy-directed changes in working practice have influenced the curricula of health professional students in the UK higher education sector, where shared inter-professional education (IPE) is promoted. There is international support for this approach. The WHO Study Group on Inter-professional Education and Collaborative Practice maintains that it is necessary in preparing a
‘collaborative practice-ready workforce’ (Yan et al., 2007). Across Scotland, IPE has been delivered to health-care students completing degree courses in Dietetics/Nutrition, Medicine, Nursing, Occupational Therapy, Pharmacy, Physiotherapy, Podiatry, Radiography and Speech and Language Therapy/Audiology.

Arguably, these recent changes in health workforce policy and educational curricula may encourage among health-care and medical students recognition of the need for shared responsibility. Irrespective of their personal professional discipline, students may appreciate the value of an integrative approach to address alcohol misuse, capitalizing on complementary skills offered by health-care colleagues.

The impending graduation of the first student cohort to complete the newly implemented four-year IPE teaching modules within Scotland (delivered to nursing and allied health professional (NAHP) professional degree courses) presented a unique opportunity to explore students’ perceptions and attitudes to ABIs and professional responses to alcohol misuse. Additionally, we have compared their data with that collected from their peers in medicine, and secondly, with those of recently matriculated first year medical and health-care students.

Given the large number of students involved, and our desire to incorporate questions exploring support for aspects of recent Scottish alcohol policy proposals, we designed a questionnaire to address the following questions:

(a) What are the levels of knowledge around current UK health advice relating to alcohol use among a sample of health-care students in Scotland?
(b) What are the students’ attitudes to their own professional role in the field of alcohol misuse?
(c) What are the students’ perceptions of the potential contribution of future colleagues from other professional disciplines?
(d) Do these students, in principle, support four key policy proposals put forward by the Scottish Government to address the problems of alcohol misuse?

METHODS

Participants

This cross sectional questionnaire-based study (conducte during 2008–2009) invited participation from two cohorts of students. The first consisted of first year students enrolled on NAHP courses at one higher education institution (HEI), and the second of medical students, shortly following matriculation. The second cohort comprised fourth year NAHP students and fifth year medical students, all due to graduate in July 2009 from a total of six Scottish HEIs. Three of the HEIs offered NAHP courses and three were medical schools.

For medical students, a link to the electronic copy of the questionnaire and an invitation to participate were posted on course websites. Remaining participants (nursing, dietetics/nutrition, occupational therapy, pharmacy, physiotherapy, podiatry, radiography and speech and language therapy/audiology students) completed a paper form of the questionnaire at timetabled lectures. No advance warning of the study was given. (At two classes, one involving dieticians and one of two classes of radiographers, timetable restrictions prevented this form of sampling, and here the link to the questionnaire was administered through class electronic distribution lists (e-mail).)

Favourable ethical opinion was obtained from each participating HEI. The first page of the questionnaire comprised an information sheet giving details of the study, and assurances of confidentiality and anonymity. Students were assured of their right to decline participation, and informed that the results would be presented at conferences, and/or appear in published form. Completion of the questionnaire was taken as informed consent.

Questionnaire

The questionnaire contained three sections. Section A sought basic demographic data: gender, age, undergraduate year, degree specialization, drinker/non-drinker classification. (Non-drinkers were defined as drinking no more than ‘2 glasses of wine, 1–2 pints of beer per year’.) A final question asked the student to define the phrase ‘someone with alcohol problems’ in their own words. (In an attempt to increase participation rates and to comply with ethical committee stipulations, no further questions relating to personal drinking levels were included.)

Section B explored knowledge relating to current UK responsible drinking guidelines for daily consumption (Department of Health, 1995) and was shaped by a questionnaire previously employed by the authors (Gill and O’May, 2007b). All participants were asked to note the daily limits for consumption in the UK for males and females. Drinkers were then asked to list their alcoholic drink of choice, its size (e.g. bottle, can, shot) and its UK unit content. (One UK unit is equivalent to 8 g of ethanol.) From this information, and using the manufacturer’s product data if required, the unit content was calculated. The estimate of the drink unit content provided by the student was then categorized as ‘underestimate’, ‘overestimate’ or ‘accurate’. (For wine, an alcohol by volume of 12% was assumed.) Non-drinkers, instead, answered a general question relating to the units contained in a typical glass of wine. The four final questions in this section related to key proposals emerging from the Scottish Government’s Discussion paper (Scottish Government, 2008) relating to drink promotions, minimum pricing, drink driving limits and legal age for off-sales purchases. Results from these final questions have been reported elsewhere (Gill et al., 2010).

Section C began with an open question asking the participant to name the profession(s) ‘best placed to intervene and offer advice when it is suspected that a patient has a problem with alcohol’. Ten statements then followed to which participants were required to respond according to a six-point Likert scale ranging from ‘strongly disagree’ to ‘strongly agree’. (The questionnaire designed by Happell and Taylor (2001) of reported validity and reliability for use with practicing nurses was employed to aid the design of questions.) The questionnaire took ~5–10 min to complete.

Prior to distribution, two NHS practitioners with relevant clinical expertise were asked to comment on the content validity of the questionnaire. In addition, the questionnaire was piloted using second year allied health professional students.
Their comments influenced the final form of the tool.

Data analysis

Coding and data entry of every seventh questionnaire were cross checked. Data were analysed using Microsoft Office Excel 2007 and the Statistical Package for the Social Sciences (SPSS) version 17. Differences between independent samples were investigated using the *t*-test and ANOVA for continuous variables and the *χ*² test for proportions (level of significance was set at *P* < 0.05).

RESULTS

In total, 278 first year and 527 final year students completed questionnaires (*n* = 805). Response rates varied (64.4–100% of those attending lectures), but were much lower where the electronic form of the questionnaire was employed (e.g. medical students: 17.5–26.1%).

Sample demographic information is presented in Table 1. Overall, the sample was predominantly female (86%) with just over one in ten of all students self-reporting as non-drinkers (11.4%). As expected, final year students were significantly older than first year students (*P* < 0.0001). Within the latter group, podiatry students were significantly older than other students (*P* < 0.01). Scottish honours undergraduate degree involve four years of study, and the medical degree, five years. (However, medical students were significantly younger than the combined group of other final year students (*P* = 0.04)). There was no significant difference between the ages of the drinkers and non-drinkers in either grouping. Among final year students, males were more likely to be non-drinkers than females (19.6% versus 9.7%; *P* = 0.012), no similar difference was evident in first year students.

Knowledge and understanding of health guidelines

Table 2 summarizes students’ knowledge of recommended UK daily limits for alcohol consumption (2–3 UK units for women, 3–4 UK units for men, where one UK unit is equivalent to 8 g of ethanol (Department of Health, 1995)). Answers of 2, 2–3 and 3 units were scored as correct for women, 3, 3–4 and 4 units for men. Accurate recall of female or male daily consumption guidelines among first year students was poor. Overall, around one-third offered no answers to these questions. Final year students performed better; the number failing to provide any answer fell to one in ten, with percentages correctly

<table>
<thead>
<tr>
<th>Student group</th>
<th>UG year</th>
<th>Number of participants</th>
<th>% Female</th>
<th>% Non-drinkers</th>
<th>Mean age in years (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietetics/nutrition</td>
<td>1</td>
<td>15</td>
<td>100</td>
<td>13.3</td>
<td>19.4 (3.3)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>7</td>
<td>100</td>
<td>0</td>
<td>22.3 (5.2)</td>
</tr>
<tr>
<td>Medicine</td>
<td>1</td>
<td>61</td>
<td>68.9</td>
<td>6.3</td>
<td>18.8 (1.4)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>121</td>
<td>70.2</td>
<td>15.7</td>
<td>23.5 (2.9)</td>
</tr>
<tr>
<td>Nursing</td>
<td>1</td>
<td>35</td>
<td>94.3</td>
<td>17.1</td>
<td>20.6 (4.7)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>44</td>
<td>97.7</td>
<td>6.8</td>
<td>23.7 (5.9)</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>1</td>
<td>38</td>
<td>89.5</td>
<td>13.2</td>
<td>21.3 (5.0)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>109</td>
<td>95.4</td>
<td>6.4</td>
<td>25.9 (7.0)</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>4</td>
<td>84</td>
<td>70.2</td>
<td>21.4</td>
<td>23.4 (3.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>1</td>
<td>35</td>
<td>71.4</td>
<td>14.3</td>
<td>22.2 (6.4)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>90</td>
<td>78.9</td>
<td>2.2</td>
<td>23.1 (4.4)</td>
</tr>
<tr>
<td>Podiatry</td>
<td>1</td>
<td>30</td>
<td>90.0</td>
<td>20.0</td>
<td>26.3 (11.0)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>21</td>
<td>90.5</td>
<td>14.3</td>
<td>26.7 (7.1)</td>
</tr>
<tr>
<td>Radiography</td>
<td>1</td>
<td>35</td>
<td>97.1</td>
<td>5.7</td>
<td>20.5 (4.9)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>22</td>
<td>77.3</td>
<td>18.2</td>
<td>25.9 (6.3)</td>
</tr>
<tr>
<td>Speech and language/audiology</td>
<td>1</td>
<td>29</td>
<td>97.0</td>
<td>24.1</td>
<td>20.3 (3.7)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>29</td>
<td>96.6</td>
<td>13.8</td>
<td>22.1 (1.6)</td>
</tr>
<tr>
<td>Total (year 1)</td>
<td></td>
<td>278</td>
<td>85.6</td>
<td>13.3</td>
<td>21.0 (5.8)</td>
</tr>
<tr>
<td>Total (final year)</td>
<td></td>
<td>527</td>
<td>85.7</td>
<td>10.1</td>
<td>24.3 (5.5)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>805</td>
<td>85.7</td>
<td>11.4</td>
<td>23.0 (5.5)</td>
</tr>
</tbody>
</table>

*No first year students were recruited.

<table>
<thead>
<tr>
<th>Response</th>
<th>First year students</th>
<th>Final year students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male guidelines</td>
<td>Female guidelines</td>
</tr>
<tr>
<td>Correct (<em>n</em>)</td>
<td>40.3% (112)</td>
<td>46.0% (128)</td>
</tr>
<tr>
<td>Underestimated (<em>n</em>)</td>
<td>10.8% (30)</td>
<td>11.9% (33)</td>
</tr>
<tr>
<td>Overestimated (<em>n</em>)</td>
<td>15.5% (43)</td>
<td>11.5% (32)</td>
</tr>
<tr>
<td>Gave weekly guidelines (14/21 units) (<em>n</em>)</td>
<td>0.2% (1)</td>
<td>0.4% (2)</td>
</tr>
<tr>
<td>‘Don’t know’ selected or non-response (<em>n</em>)</td>
<td>33.5% (93)</td>
<td>30.6% (85)</td>
</tr>
<tr>
<td>Total (<em>n</em>)</td>
<td>278</td>
<td>278</td>
</tr>
</tbody>
</table>
recalling guidelines rising. In both year groups, students from medicine performed best; 89% of final year and 64% of first year students correctly identified female guidelines. Among all other first year student professional groupings, this figure fell to 47% or less, performance being poorest among occupational therapy and radiography students (additionally for these students, almost one-half, 48 and 49%, respectively, provided no answer). Final year radiography students fared a little better. In both year groups, recall of female guidelines was superior to that of male guidelines, arguably attributable to the greater number of female participants.

To explore understanding, rather than recall, of drinking guidelines, drinkers were asked to estimate the unit content of their drink of choice (Table 3).

Slightly more than one-third (36.9%) of first year and one-half (55.9%) of final year student drinkers could provide an accurate estimate of the unit content of their personal drink choice, while 20% of all student drinkers provided no answer. Performance was best among medical students in both year groups, but surprisingly, identical at 65%. While 84% of final year nursing students could accurately recall guidelines, only 46% of drinkers provided an accurate answer to this question.

Responses to the question ‘How would you define the phrase “someone with alcohol problems?”’

Many students provided several phrases in their response to this ‘open’ question (Table 4).

Responses were grouped into three broad categories: relating to ‘the amount or pattern of intake’ (e.g. drinks every day, drinks more than weekly limit); ‘reasons for drinking’ (e.g. drinking to get drunk, drinking to ensure a good time) and finally ‘the repercussions of consumption’ (e.g. addicted, negative impact on life). Among first year students overall, the most favoured responses were in the category linked to ‘amount or pattern of intake’. This pattern was also observed for each professional student group individually apart from medical students where the distribution of responses was significantly different from their peers ($P<0.001$); the greatest number of responses (65%) was in the ‘consequences of consumption’ category.

The distribution of responses provided by final year students differed significantly ($P<0.001$) from the majority of first year students for they, like first year medical students, favoured responses linked to the ‘consequences of consumption’. This was particularly pronounced among final year medical students (74% responses; $P<0.001$ when compared with their peers). Interestingly, the responses of physiotherapy students were significantly different, for they, like first year students, preferred definitions linked to the amount or pattern of consumption ($P=0.03$ when compared with their non-medical peers). For all final year student groups, the smallest number of responses referred to ‘reasons for drinking’.

Best profession

Students were asked to name the profession ‘best placed to intervene and offer advice when it is suspected that a patient has a problem with alcohol’ (Fig. 1). The percentages of students from five selected professions who identified their own profession are shown in Fig. 2.

In both year groups, medicine was the most commonly selected profession followed by nursing and then social work. Among first year students, the professions of podiatry, speech and language/audiology were not selected, while physiotherapy and radiography were named only once. This finding is also reflected in the responses of the final year students. Additionally, in this latter group, two professions (occupational therapy and pharmacy) were identified only by their own students, and those of medicine. One profession viewed as having a key role in this area was social work. The data presented in Fig. 2 suggest that only around half of students in three professions (occupational therapy, pharmacy and dietetics/nutrition), which arguably have a role to play in addressing alcohol misuse, view themselves, even in their final year of study, as being best placed to intervene when alcohol misuse is suspected.

Attitude and professional role

Students were required to respond to various statements according to a six-point Likert scale, ranging from ‘strongly disagree’ to ‘strongly agree’ to various statements (Table 5).

In both year groups, there was considerable agreement that early identification of problems could enhance the likelihood of treatment success. Slightly fewer students recognized that a common responsibility existed among all health professionals for intervening when a problem is suspected. This was particularly evident in the responses from students of speech and language/audiology and radiography. A majority of both year groups did not view alcohol problems as being beyond the control of the person affected or that problems can only be effectively treated when a person hits ‘rock bottom’. However, in the final year grouping, students of radiography and dietetics/nutrition were less convinced.

Overall, in both year groups a large majority of students believed their own profession had a role to play in administering brief interventions with first year students less certain
Again this conclusion could not be applied to all professions, notably radiography and speech and language/audiology. Doubt around personal knowledge levels is evident, with less than half of first year students reporting that they had appropriate knowledge to advise patients about responsible drinking. (For several professions in both year groups, agreement was <50%). However, within both year groups there was a significant increase in the percentage who felt that they had the personal qualities required to initiate brief interventions ($P < 0.001$ in each case). Significantly more final than first year students reported potentially feeling embarrassed about asking patients about alcohol ($P = 0.015$). A majority of students in both year groups felt people should have the right to use alcohol as they wish in their own home but this was not true in all professional groupings.

Responses of individual professions to the question asking them if they felt they have the appropriate knowledge to advise patients about responsible drinking are contrasted with their accurate recall of drinking guidelines and ability to estimate the unit content of their preferred drink in Fig. 3.

The confidence of first year medical students in their abilities is, to a certain degree, matched by their knowledge and correct interpretation of drinking guidelines. Final year medical students appear to have improved confidence and more accurate recall of guidelines, but the percentage failing to quantify accurately the alcohol unit content of their preferred drink remains unchanged.

For both occupational therapy and nursing students, the final year is characterized by higher levels of confidence in disseminating alcohol advice and enhanced recall of guidelines etc. However, gaps in the final year students’ skill base

![Fig. 1. Professions identified as being best placed to intervene when it is suspected that a patient has an alcohol problem.](image-url)
are evident. The poor self-appraisal of skills reported by students of radiography and speech and language/audiology described in Table 4 is reflected in Fig. 3.

DISCUSSION

Despite widespread, often adverse, media coverage of published alcohol statistics and the proposed policy changes within Scotland, our study has provided clear evidence of knowledge gaps within this sample of future NHS employees. Final year students’ awareness of drinking guidelines was superior to that of first year students, but even here, around one in three (34.5%) could not provide an accurate answer relating to recommended daily consumption limits for males, 27.3% for female guidelines. Recall was best within medicine and nursing, the professions more traditionally linked to the treatment of alcohol misuse.

Exploration of final year students’ ability to quantify the unit content of their drink of choice revealed that only around one-half (55.9%) of self-reported drinkers could do so. While this performance was significantly better than that of their first year peers ($P < 0.001$), it remains concerning that, where effective intervention depends on the ability to relay and interpret responsible drinking advice to patients, some of these students may have difficulties.

This view is reinforced by students’ responses when asked if they had the appropriate knowledge to advise patients about responsible drinking. The majority of students in three professions disagreed: physiotherapy, radiography and speech and language therapy/audiology. Only in three final year groups; medicine, nursing and pharmacy did >60% of students agree that they had appropriate knowledge. Undoubtedly, successful administration of ABIs will require skills in addition to the simple dissemination of the detail of consumption limits, but, if changes in health policy demand a sharing of professional responsibility in the area of alcohol misuse, our findings imply a need for HEIs to address clear gaps in the knowledge of some students.

Certainly, medical curricula within the UK have been subjected to review. Benefits in terms of student knowledge in relation to alcohol misuse resulting from a critical appraisal and revision of the medical curriculum content at one Scottish medical school have been reported (Steed et al., 2010). In England, a newly accredited Undergraduate Medical Schools Curriculum on Substance Misuse, developed by Professor Ghodse of the International Centre for Drug Policy, has been hailed as a good example of appropriate governmental response to UN policies designed to address substance misuse. The curriculum is now recommended to all English medical schools. Given the toll alcohol misuse exerts on NHS budgets and society, it seems timely to advocate for a greater discussion of the curricular content devoted to the subject of alcohol misuse by Scottish policy makers, professional bodies and the universities.

Student definitions of the phrase ‘someone with alcohol problems’ were diverse. On first appraisal, this may infer wide understanding of the topic. First year students (apart from medical) favoured definitions linked to the amount or pattern of intake, despite their own knowledge in that area being poor. In contrast, final year students preferred definitions describing the consequences of drinking as did medical students in both cohorts. Despite the superior knowledge of medical students in relation to the detail of health guidelines, only a quarter of their definitions employed quantitative terminology.

While speculative, it could be argued that because student drinkers are linked to the heaviest drinking age group by population surveys, the low number offering definitions linking to ‘reasons for drinking’, such as ‘drinks to get
drunk’, ‘drinks for a good time’ and ‘can’t socialize without’, may reflect a reluctance of some students to adopt terminology that could describe personal drinking patterns. The excesses of the drinking behaviour of medical and other students have been recorded (Newbury-Birch et al., 2001; Guise and Gill, 2007). Among Scottish women, the 16–24-year age group is most likely to exceed weekly guideline limits, almost one-third doing so with 60% of males and females in this age group report ‘binge drinking’ in the previous week (Information Services Division, 2009a). Responses to a later question may also be relevant; the divided opinion characterizing the final year students’ responses relating to ‘the right to use alcohol as a person wishes in their own home’ may reflect a conflict between a student’s personal drinking behaviour and the health concerns linked to alcohol misuse. In exploring who was best placed to intervene and offer advice, there was some consensus evident in both year groups that medical students were the most appropriately placed profession, followed by nursing. Potentially, these two professions are viewed as front-line practitioners spanning the widest range of clinical contexts. Interestingly, while there were no participating social work students (despite invitation), this was the third most frequently named profession. Several findings are pertinent to the discussion around the merging of roles and responsibilities currently promoted within the NHS. When asked specifically if their profession had a role to play in ABIs, a majority in two professional groups disagreed; radiography and speech and language/audiology. Furthermore, the value of the professional role in relation to intervention promoted by certain professional
bodies (pharmacy and occupational therapy) was recognized by some of their own students, but was poorly acknowledged by other students (apart from those studying medicine). The professions of physiotherapy, podiatry, radiography and speech and language therapy/audiology were identified infrequently or not at all.

For pharmacy students, 94% believed that their own profession had a role to play in this area, while fewer, 50%, identified their profession as being best placed to intervene and offer advice around alcohol. The Royal Pharmaceutical Society of Great Britain has highlighted the potential contribution of the community pharmacists in tackling alcohol misuse, administering brief interventions etc., and the need to promote an awareness of their role among the public, government and key policy advisors (Watson et al., 2008). (Our study findings suggest that this likely includes other health-care workers.) Sheridan et al. (2008) concluded that community pharmacists in New Zealand lacked knowledge, skills and confidence in this area of practice. However, Fitzgerald et al. (2009) concluded from a study of eight purposively selected pharmacies in Glasgow that while pharmacists displayed knowledge gaps in relation to basic drinking guidelines, there was endorsement of the appropriateness of their role in this area, a finding supported by Watson and Blenkinsopp (2009).

Research in England has shown engagement by members of the public with community pharmacy ABIs, whereby most were willing to discuss drinking (96%, n = 97) and accept written information (98%, n = 99; Dhaital et al., 2010).

The particular relevance of the occupational therapist’s role was highlighted only by its own students and those of medicine. Again, there may be a need for greater dissemination of knowledge around the potential value of occupational

---

Fig. 3. Comparison of student’s self-appraisal of appropriate knowledge relating to responsible drinking guidelines, their ability to correctly estimate the unit content of their personal drink of choice and their accurate recall of the content of the UK drinking guidelines.
therapy, which the relevant professional body ought to address and debate within the higher education sector (Gill et al., 2011). With regard to the ongoing monitoring of the HEAT four target, NHS Health Scotland (2011) has stated that while 2011–2012 ABIs are to continue to be delivered in the priority health-care settings, by doctors and nurses, they are ‘… keen to build the evidence base for delivering brief interventions in other settings, and in pursuit of this goal … would be happy to work with any Board which is exploring the application of ABIs in such settings’ (Scottish Government, 2011, p.3).

Responses to questions relating to attitude and professional role were generally optimistic about the benefits of intervention and treatment. A majority of all student groups (except dieticians) ‘would not be embarrassed to ask a patient about their use of alcohol’. This finding is interesting. A qualitative study (Lock et al., 2002) explored attitudes of primary care British practice nurses, who reported feelings of embarrassment and awkwardness when asking patients about drinking habits. Some had experienced hostile responses from patients, and others considered that such questioning could interfere with the nurse–patient relationship, particularly in those patients not yet ready to change (Lock and Kaner, 2004). Similar concerns have been expressed by general practitioners (Kaner et al., 1999). In our study, significantly more final than first year students reported being potentially embarrassed in this situation. Clinical placement experience may have impacted on this opinion, an influence not yet experienced by first year students. However, another study in one New Zealand hospital (Pulford et al., 2007) reported that most medical and nursing respondents felt comfortable providing an alcohol assessment, viewing it as a legitimate part of their professional role. Interestingly, many lacked knowledge about standard drink measures and recommended drinking limits. A recent publication discussing the concerns of UK general practitioners in relation to the identification and response to alcohol problems described GPs as supportive of counselling but conscious of a lack of relevant training (Lock et al., 2010).

Our findings have some important limitations that impact on generalizability. While more than 800 students participated in this study, response rates within the individual professions varied greatly, from a commendable 90% of all full-time BSc (Hons) occupational therapy and physiotherapy students present at lectures within Scottish universities on the day of survey, to 17.5% of medical students who self-selected as participants to an electronic survey. (In the latter case, initial approval had been granted for the use of a paper form of the survey but was withdrawn by one medical school once the study commenced.) It must be acknowledged that the views of medical students may not be typical of their year, reflecting instead those who had an interest in the topic. Several of the findings attributed to the dietetic students seem contradictory, but the low number of participants limits speculation. Further exploration of the apparent anomalies with a greater number of students would be advisable.

We have restricted the extent of statistical testing between the groups. Our study is cross sectional in design and we cannot assume that ‘year of study’ is the only variable that distinguishes the two student groups.

Additionally, our study does not present the views of other relevant professions, such as art therapy, nor have we documented the clinical experience gained by students during their undergraduate years or the alcohol-related content of the curriculum of the various student groups during their four/five years of degree education. Serious health problems related to alcohol consumption may not have been witnessed within the clinical setting by all students.

While the gender distribution (85.7% females for NAHP, 70.2% for medicine) is skewed, it is nevertheless closely aligned to that of allied health professionals working in Scotland (90% females, 10% male workers (Information Services Division, 2009b)). In 2002–2003, a gender bias was reported for all UK medical schools with the percentage of women exceeding 65% (BMA, 2004).

Our findings would benefit from further qualitative research designed to explore in greater depth students’ reasons for certain opinions and beliefs, recognizing the heterogeneity of each profession’s core values and theoretical frameworks. Further prospective work completed one or two years post qualification would also be of potential value.

To our knowledge, our study is the first to investigate the concerns and perceived barriers to the implementation of ABIs among the various professional student groups as they prepare to enter the changing workplace, that is the NHS. Most published works in this area have focused on qualified practitioners, predominantly within nursing and medicine. Roles of other ‘front line’ health professionals, such as physiotherapists and occupational therapists, are largely ignored. Our findings, while identifying some gaps in basic knowledge around alcohol health guidelines, also reveal evidence of role uncertainty in this area of practice. There are implications for the content of undergraduate curricula. Perhaps, this topic would be best served when considered within the curriculum of inter-professional modules, to ensure the promotion of a clearer awareness of the potential contribution of future colleagues in this important area of health promotion. Further debate around the particular role and responsibilities of multidisciplinary team members in this key area of Scottish public health would be welcome. While the Scottish Government have indeed acknowledged the need to accumulate evidence around the efficacy of ABIs in a variety of settings, (Scottish Government, 2011), our findings would suggest that if this proposes involvement of a broad range of professions, then HEIs must step up to the mark.

Acknowledgements — The authors would like to thank the participants and university staff who facilitated the study.

Conflict of interest statement. None declared.

Funding — Funding for this study was provided by the Alcohol Education and Research Council (small grant Ref SG 08/09 104; J.G.).

REFERENCES


Beeston C, Robinson M, Craig N et al. (2011) Monitoring and evaluating Scotland’s Alcohol strategy. Setting the Scene:


