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Alcohol education revisited: Exploring how much time we devote to alcohol education in the nursing curriculum

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ABSTRACT

Introduction: This study examines student nurses knowledge, attitudes and educational preparation to work with patients who misuse alcohol. The study begins to quantify how much time is devoted to alcohol education at one Scottish University.
Method: The study modified the Short Alcohol Attitudes Problem Perception Questionnaire (SAAPPQ) and incorporated three case vignettes to examine the student nurses knowledge, attitudes and experience of working with patients who have an alcohol problem. The questionnaire was hand delivered to a convenience sample of third year nursing students.
Results: The results show that the student nurses exhibit positive attitudes and beliefs about working with patients who have an alcohol misuse problem. A series of significant associations was found between the adult nursing cohort and their ability to include a comprehensive alcohol history in their nursing assessments ($\chi^2 = 19.82$, df $= 4$, $p < 0.0005$); recognise signs of acute alcohol withdrawal ($\chi^2 = 52.26$, df $= 16$, $p < 0.000$); and the psychological signs associated with alcohol misuse ($\chi^2 = 41.81$, df $= 16$, $p < 0.000$). A baseline figure of 2.5 h of alcohol education is noted at this university.
Conclusions: Alcohol education strongly features in three out of the five nursing programmes surveyed. Nurse education needs to focus on strategies that extend to teaching nurses how to respond, provide brief interventions and identify when to refer the patient for specialist intervention. These approaches should be universal to all areas of nursing practice.

Introduction

Therapeutic commitment and attitudes lies at the heart of working with complex patient groups such as those with alcohol and drug problems. These concepts are influenced by multiple psychological and social factors such as motivation, professional responsibility and support mechanisms (Ford et al., 2009; Kaner et al., 2009). Knowledge, attitudes, confidence and skills to screen, prevent and treat alcohol problems are cited as the essential elements to improve the quality of care delivered to patients with alcohol problems (Anderson et al., 2009; Rassool and Rawaf, 2008). Within the literature, few interventions attempt to improve knowledge, attitudes or skills to work with patients who misuse alcohol. This prompted a re-examination of the literature around alcohol; clinical supports provided to pre registration nursing students to work with patients with alcohol misuse problems, and to determine how much time is devoted to preparing the future workforce.

Alcohol

Alcohol and its harmful effects result in 2.5 million deaths worldwide each year with 1 in 4 people (a total of 10 million) estimated to be placing their health at risk by drinking more than the recommended daily units of alcohol (WHO, 2011; NICE, 2011). Tackling the issue of alcohol misuse and intervening with hazardous and harmful drinkers is acknowledged worldwide as a harm reduction measure (NICE, 2010; Kaner et al., 2009). Utilising and capitalising on the contribution all health professionals make in relation to screening and preventing long term problems associated with alcohol misuse is also a recognised resource in the UK and abroad (Vadlamudi et al., 2008). This places a duty on all nurses, doctors and allied health professionals to identify and address alcohol issues when they have contact with patients in primary, secondary and tertiary health services.

Effect of education on knowledge, skills and attitudes

A plethora of studies over the last decade acknowledge that nurses, doctors and allied health professionals have negative

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attitudes and experiences working with this patient group (Tran et al., 2009; Kaner et al., 2009; Lopez-Bushnell and Fassler, 2004; Lock et al., 2002; Kaner et al., 1999). Knowledge, attitudes, confidence and skills are cited as the barriers to effective engagement and a call for more education and training is voiced in the literature as an immediate solution (Tsai et al., 2010). The educational needs of pre and post-qualified staff are found to be similar and a wide range of studies show that they equally need to develop their knowledge, skills and confidence to work with this patient group. These studies include Trauma Nurses (Andrew et al., 2011), General Nurses (Tran et al., 2009), Practice Nurses (Owens et al., 2000; Deehan et al., 2002), General Practitioners (Kaner et al., 2009), Mental Health Nurses (Munro et al., 2007) and Substance Misuse Nurses (Matheson et al., 2004).

Tran et al. (2009) pre and post test design examined the knowledge, skills and competence of general medical and surgical nurses following a two-day workshop on the management of alcohol problems. The results identified that the nurses overall knowledge and ability to identify, refer and manage clinical situations involving patients with alcohol problems increased following the educational intervention. The results showed that despite the episode of education the nurses still felt they lacked confidence to work with this patient group. The survey size is small ($n = 119$ pre test and 110 post test) and only specific to this population, thus reducing the generalisability of the results.

Munro et al. (2007) completed a randomised control trial which evaluated the impact of a bespoke training programme ($n = 4$ days) on post registration mental health nurses knowledge and attitudes of substance misuse in one region of Scotland. The results identify an increase in knowledge and change of attitude post training and follow up for the experimental group. The sample size and results are small ($n = 49$) and specific to this population here therefore limitations also exist in terms of the results generalisability. Understanding the impact of this change on care delivery using a qualitative approach would have also enriched the results from the study.

Rassool and Rawaf (2008) quasi-experimental design examined undergraduate nursing students in the UK ($n = 110$) confidence to work with alcohol and drug users pre and post an education intervention. The results show a significant improvement in the students knowledge, attitude change and confidence in relation to the variables of taking a history, screening as well as recognising signs and symptoms of alcohol misuse.

Using education as an intervention with primary care nurses in the USA facilitated a change in attitudes, beliefs and confidence levels to care for patients with alcohol abuse (Vadlamudi et al., 2008). Similarly to the studies highlighted, the results are small and specific to one geographical location thus limiting their generalisability. A consistent theme evident in the above literature is that education as an intervention is required to change attitudes and skills. There is, however, limited evidence to quantify how much time should be devoted to educational programmes, in what setting and by what specific learning and teaching approach.

Tran et al. (2009) recommends the use of case studies of how to manage the patient presenting with alcohol problems and not simply using a lecture or workshop style of delivery over a two-day period. Blackman et al. (2006) echoed these findings and proposed that teaching should extend over a period of several weeks and include clinical simulation and problem based learning. Munro et al. (2007) delivered their programme across 4 days. Rassool and Rawaf (2008) covered their content in 10 h and Vadlamudi et al. (2008) utilised a period of 4 h.

Heinemann and Hoffmann (1989) built upon Carter (1983) survey of alcohol education in USA nursing schools, and evaluated 1035 nursing programmes, finding that, most schools condensed their instruction on alcohol and drugs to less than 10 h. Falkowski and Ghodse (1990) international study found a difference in educational preparation for General Nurses (4.3 h) and Mental Health Nurses (14.1 h).

Howard et al. (1997) literature review of alcohol education in nursing schools identified a consistent theme that there is limited exposure to alcohol and drug education. In the same year, Marcus (1997) found that nurse educators are rarely trained in the field of substance misuse and find it difficult to practice developments in the field.

Mollica et al. (2011) survey appears to be the only recent study to quantify the number of hours attributed to nurse education. The authors concluded that their finding of 1–5 h has shown little change from earlier research.

Several studies attempt to explain why a limited amount of time is devoted to alcohol education. Happell and Taylor (2001) assert that this change may be indicative of the pre registration curriculum competing and responding to professional and political priorities. This is also echoed by Vadlamudi et al. (2008) who remark that nurse educators are faced with constraints in terms of what should be included or not without losing the essential knowledge of the healthcare profession.

This quantitative study contributes to this growing body of evidence, and begins to quantify how much time and preparation is afforded to alcohol misuse in an undergraduate nursing curriculum at one Scottish University.

Methods

The study utilised the Shortened Alcohol Attitudes Problem Perception Questionnaire a well validated measurement tool developed by Cartwright (1979), Gorman and Cartwright (1991) which has been modified in a number of research studies measuring attitudes amongst professionals working with various patient groups, i.e. mental health (Siegfried et al., 1999); drug misuse (Watson et al., 2006); men with violence related problems (Manley and Leiper, 1999). Three vignettes were extracted from the Scottish Social Attitudes Survey to explore how the student nurses would manage patients who exhibited patterns of binge drinking, hazardous drinking and chronic drinking (Ormston and Webster, 2008). Several experienced clinicians ($n = 5$) and one third year pre registration student ($n = 1$) were asked to comment on the validity and reliability of the questionnaire and to determine the extent to which the measure adequately covered the various areas under investigation.

Sample and recruitment

Recruitment involved participants from one Scottish University and the questionnaire was distributed to a convenience sample across five undergraduate nursing cohorts. The participants were informed of the study by announcement via the university student virtual learning environment Blackboard© that the researcher would attend the beginning of one of their lectures to discuss the study, and invite those present to take part. The researcher distributed the questionnaire and information pack with instructions on how to return to a secure box within the university. No incentives were offered in this study.

Ethical consideration

Ethical approval was obtained from the University Ethics Committee. An information sheet was provided with the questionnaire outlining the rationale for the study. No personal data was gathered from the participants and all responses were anonymised

and treated in confidence. The data were stored in accordance with University regulations and the Data Protection Act 1998.

Data analysis and results

The data were analysed using SPSS version 18.0. Statistical analysis was carried out using bi-variate methods for categorical data, i.e. Chi-Square test for significance and Spearman's rho.

Results

A total of 358 questionnaires were distributed to 3rd year pre registration nurses enrolled at one Scottish University during the month of February 2009. 138 questionnaires were returned accounting for a 38% response rate with no missing data. Five areas of nursing were involved in the study. Fig. 1 shows the distribution of respondents depending on their programme of study. 73% ($n = 101$) were registered on the adult nursing programme; 8% ($n = 11$) from mental health; 7% ($n = 10$) from learning disability; 5% ($n = 7$) from child nursing and 6% ($n = 9$) from BA Nursing studies. An overrepresentation is noted in relation to the adult nursing programme and this appears to be a typical representation of intake numbers to Scottish nursing schools.

The majority of the sample was female ($n = 126$, 91%) with ($n = 12$) 9% of students in the study representing a male response. The gender differentiation in undergraduate programs also appears to be typical of gender distribution in nursing and in Scotland generally. The age of respondents ranged from 19 to 53 years with the average age 27 years, SD: 8.0. This is also a typical representation of age within undergraduate nursing with more mature students navigating to this area as a career choice.

Fig. 2 shows the number of hours attributed to alcohol education as estimated by the different nursing cohorts. The distribution shows a range of 1–6 h with an average time of 2.5 h (SD: 1.02) calculated across the cohorts.

It is important to note that three out of the five cohorts report receiving alcohol education, with the remaining two citing no alcohol content associated with their programme. Seventy five (75) % of participants report that they had received alcohol education and 3% had undergone specialist training to provide alcohol-focussed interventions, e.g. alcohol counselling. The results also indicate that the learning and teaching strategy used to deliver the alcohol education included lectures, seminars, problem based learning and guest speakers from Alcoholics Anonymous as well as local substance misuse teams outlining their remit.

The results in Table 1 detail the students acknowledgement that they have a responsibility to identify and intervene with patients

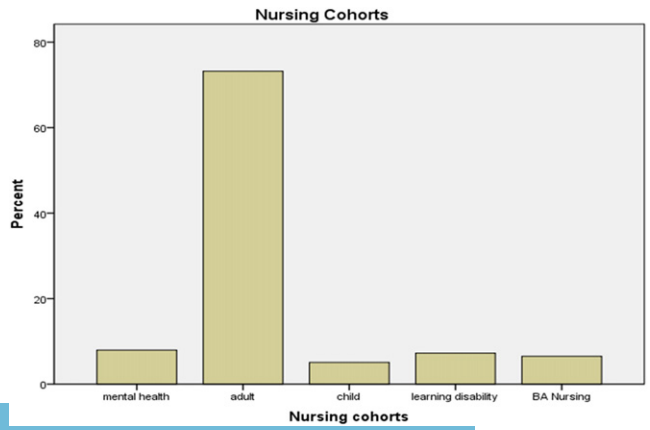

Fig. 1. Programme of study.

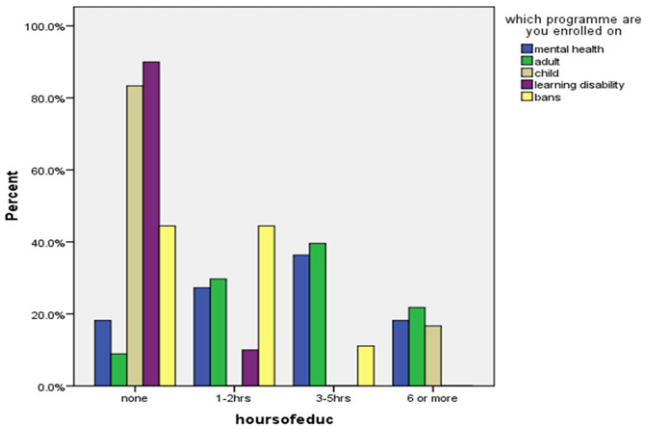

Fig. 2. Alcohol education and nursing cohort.

who have an alcohol problem. The results also capture their belief that an alcohol history should be a routine part of nursing assessments and anyone can develop an alcohol problem. 41% ($n = 57$) agree that they have received encouragement within their clinical placements to work with patients with alcohol problems.

Preparation for practice, knowing how to intervene, providing brief intervention and sign posting for specialist intervention is highlighted in Tables 1 and 2. It is important to note that the study found that whilst the students ask about their patients alcohol consumption they are often unsure and do not know if they have enough clinical skills to care for a patient withdrawing from alcohol. Clinical placement support is variable and Table 1 details that 41% ($n = 57$) of students agreed that they have received encouragement within their clinical placements to intervene with patients who have an alcohol related problem; 15% ($n = 21$) were unsure and 38% ($n = 54$) felt they had received no support. More than half of the participants report that they have not received sufficient education and training to work with this patient group.

Table 2 captures the students ability to recognise the signs and symptoms of alcohol misuse. A series of significant associations was found between the adult nursing cohort and their ability to include a comprehensive alcohol history in their nursing assessments ($\chi^2 = 19.82$, df $= 4$, $p < 0.0005$); recognise signs of acute alcohol withdrawal ($\chi^2 = 52.26$, df $= 16$, $p < 0.000$); and the psychological signs associated with alcohol misuse ($\chi^2 = 41.81$, df $= 16$, $p < 0.000$). However, no significance was found between the adult programme and the students belief that they had enough clinical skills to care for a patient with an alcohol problem.

The participants perceived that a number of factors may hinder their ability to work with this patient group. These factors included inadequate education and training prior to clinical practice, lack of exposure to the patient group, and limited workplace support reducing their confidence and competence to care for a patient with alcohol problems. A range of students expressed personal/family history reasons as a factor that affected their ability and choice to work with this patient group, for example, fears about the patient being aggressive, not being able to cope with any ambivalence and resistance to change.

Limitations

No pilot study was undertaken to test the research design and application of the questionnaire due to time constraints. The convenience sampling approach limits the generalisability of the study findings.

Table 1
Knowledge, attitudes and skills.

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total count
I have a responsibility to identify patients with alcohol related problems.	1 (0.7%)	2 (1.4%)	9 (6.5%)	64 (46.3%)	62 (44.9%)	138
For the vast majority of problem drinkers counselling is a waste of effort.	28 (20.2%)	72 (52.1%)	27 (19.5%)	8 (5.7%)	3 (2.1%)	138
Only those patients with a history of frequent intoxication should be asked about their drinking.	55 (39.8%)	75 (54.3%)	5 (3.6%)	2 (1.4%)	1 (0.7%)	138
Recently detoxified patients are likely to drink as soon as they are out of hospital.	6 (4.3%)	36 (26%)	60 (43.4%)	33 (23.9%)	3 (2.1%)	138
An alcohol history should be routine part of all nursing assessments.	3 (2.1%)	10 (7.2%)	9 (6.5%)	70 (50.7%)	46 (33.3%)	138
I have a responsibility to intervene with patients who have an alcohol related problem.	0 (0%)	10 (7.2%)	20 (14.4%)	78 (56.5%)	30 (21.7%)	138
I do not have enough clinical skills to care for intoxicated patients.	5 (3.6%)	46 (33.3%)	33 (23.9%)	45 (32.6%)	9 (6.5%)	138
I have encouragement within my work placements to intervene with patients who have alcohol related problems	9 (6.5%)	45 (32.6%)	21 (15.2%)	57 (41.3%)	6 (4.3%)	138
Anyone who drinks can become dependent on alcohol.	3 (2.1%)	26 (18.8%)	14 (10.1%)	70 (50.7%)	25 (18.1%)	138
I do not have enough clinical skills to care for patients withdrawing from alcohol.	3 (2.1%)	54 (39.1%)	27 (19.5%)	46 (33.3%)	8 (5.7%)	138
I have received sufficient nursing education and training to care for people with alcohol related problems.	14 (10.1%)	58 (42%)	25 (18.1%)	39 (28.2%)	1 (0.7%)	138

Discussion

Student nurses beliefs and attitudes at this Scottish University towards working with patients who misuse alcohol are positive. This is strengthened by the students own acknowledgement that they have a responsibility (role legitimacy) to work with this patient group, and accept that this is an area of practice they should be involved in (role adequacy). Despite this, the study has shown that the 33% of students perceived their clinical skills and preparation for practice to be insufficient. For this student group their experience may have been influenced by a number of variables, specifically around perceived expectations of the educational content; and the opportunity to practice and develop their clinical skills whilst on placement.

A series of significant associations are noted between the adult nursing cohort and their ability to include alcohol in their nursing assessments, recognise physical and psychological signs of alcohol withdrawal. Whilst the student is able to recognise and identify key signs and symptoms, the study showed that the students understanding of how to manage, intervene or refer on the presenting issues was variable across all programmes. A reason for this finding could be that the student may not be familiar with detoxification processes or other specialist interventions to manage alcohol problems at this stage in their nurse training. The Nursing Midwifery Council (2010) stipulates that all nurses should be able to identify when a situation is out with their competence and refer to a specialist service. Equally, they state that nurses should be able to provide effective care, prevention and education to all patients.

The study also found that alcohol features as a component part of three out of five of the nursing programmes at this Scottish University. The number of hours of alcohol education ranges from 1 to 6 h with an average time of 2.5 h education provided (SD: 1.02). The respondents were given a choice of hourly ranges in the survey, rather than the option of a recording a specific number of hours. This limited the calculation of a precise number of hours of alcohol education. The findings mirror Mollica et al. (2011) baseline figure and the author concludes that 1–6 h of undergraduate nurse education on alcohol has unchanged in the last two decades. The author agrees with Vadlamudi et al. (2008) that one of the reasons to explain this finding is that the pre registration curriculum is competing with and responding to multiple professional and political priorities.

This Scottish University adopts a range of learning and teaching strategies specific to alcohol misuse. Guest speakers such as Alcoholics Anonymous and specialist addiction teams outline their remit and deliver these strategies in the format of lectures and seminars. This approach is supported in the literature by Blackman et al. (2006) who advocates that the use of various learning teaching and assessment methods such as clinical simulation laboratories, problem based learning, and workplace visits to enhance the confidence of nurses to work with this patient group.

This study identified that the student group experienced a variation in the type of preparation for and clinical support in the clinical environment whilst working with patients with an alcohol problem. The students dissatisfaction with their preparation to work with this patient group is particularly powerful and the study captured a range of attitudes, beliefs and concerns about their confidence and abilities. These findings are supported by Lock et al. (2002) who found that nurses had fears and reticence about addressing the problem of alcohol use with a patient, knowing when to intervene and fears about the impact this would have on their interpersonal relationships with patients.

Table 2
Knowledge, attitudes and skills.

	Never	Rarely	Sometimes	Often	Always	Total count
I include a comprehensive alcohol history in my nursing assessments.	14 (10.1%)	27 (19.5%)	40 (28.9%)	33 (23.9%)	24 (17.3%)	138
I ask my patients about their alcohol intake.	8 (5.7%)	8 (5.7%)	15 (10.8%)	53 (38.4%)	54 (39.1%)	138
I provide information about safe levels of alcohol consumption to patients.	28 (20.2%)	47 (34%)	38 (27.5%)	17 (12.3%)	8 (5.7%)	138
I am able to recognise the signs of acute alcohol withdrawal.	6 (4.3%)	14 (10.1%	52 (37.6%)	57 (41.3%)	9 (6.5%)	138
I am able to recognise when my patients' tolerance to alcohol has changed.	21 (15.2%)	35 (25.3%)	57 (41.3%)	20 (14.4%)	5 (3.6%)	138
I assess my patients for physical problems related to their alcohol use.	15 (10.8%)	32 (23.1%)	31 (22.4%)	44 (31.8%)	16 (11.5%)	138
I assess my patients for psychosocial problems related to their alcohol use.	14 (10.1%)	31 (22.4%)	41 (29.7%)	36 (26%)	16 (11.5%)	138
I am able to recognise the psychological signs related to alcohol use.	11 (7.9%)	20 (14.4%)	52 (37.6%)	45 (32.6%)	10 (7.2%)	138

Conclusion

In conclusion, there is widespread acknowledgement in the literature that nurses have limited knowledge, confidence, and clinical skills to work with patients with alcohol problems. The emphasis of this paper has been on the educational preparation and quantification of time devoted to alcohol education in one nursing school. A baseline figure of 2.5 h has been identified in terms of the amount of alcohol education provided at this University. In comparison to previous research this figure appears to be consistent across the UK and abroad.

Recommendations for practice

This study contributes to the growing body of evidence in the field of alcohol education and concludes similar findings. Whilst this acknowledgement is important, the researcher seeks to direct future research beyond the identification of knowledge, attitudes and skill deficits, to understand how nurses acquire, maintain, and enhance clinical skills in this area of practice.

The author recommends that in addition to education alone, a stepped model approach is used to develop competencies in this area of practice. This approach should commence in year one with the student exploring the impact of alcohol on individuals, families as well as society; progressing in year two to practicing and applying a focussed intervention such as a brief intervention. Years two and three should provide clinical or simulated experiences in the management and treatment of alcohol misuse. This approach will enable the student to develop their knowledge beyond identification of alcohol problems, to practicing clinical skills. Workplace support will further develop their confidence and competence to work with individuals who have alcohol problems.

The author recommends that the undergraduate curriculum of all nursing programmes should revisit their content around alcohol and the learning and teaching approaches used to support the delivery of alcohol education. An annual return of data could establish the number of hours taught on alcohol by individual universities across the UK.

Future research studies should extend to capture the career pathway of nurses from pre to post registration to understand how nurses acquire, maintain and enhance their clinical skills in this area. Another important area would be to test the impact of a focussed alcohol intervention has on client outcomes.

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