Healthy Universities: A guiding framework for universities to examine the distinctive health needs of its own student population.

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Abstract

Recognising that "health is created and lived by people within the settings of everyday life; where they learn, work, play and love"[1] The underlying principle of settings for health is that investments in health are made within social systems in which health is not necessarily the main remit[2]. In order to understand the health needs of its own community, a growing movement of Healthy Universities are interested in applying the approach within the higher education sector. This study examined the student health behaviours of one university so that future initiatives can be tailored to its own student population.

Methods

Quantitative data were gathered from 3683 students studying at a UK urban university. A 60-question online student questionnaire focusing on seven key topic areas was used to gather data and simple descriptive statistics are used to present key findings.

Results

The study has identified a need for considering alternatives ways of engaging students with appropriate health services throughout the academic year. A focus for university initiatives around healthy eating options, how to cook healthy food and the importance of keeping hydrated is highlighted as a common need. Risky behaviour involving alcohol, drug and substance use and sexual activity suggest a strong argument for not separating university sexual health and alcohol interventions.

Conclusion

Underpinned by the Healthy Universities settings concept, this study examined the health and wellbeing behaviours of one universities own student population. It highlights behaviours within the university that are similar to national averages, and some that are not. This understanding can inform the planning of future health promoting university initiatives to meet the distinctive needs of its own students.

Key Words: Healthy Universities: Settings for Health and Wellbeing. Students' health behaviours in universities

Introduction

Healthy Universities as Settings for Student Health and Wellbeing

The concept of using a settings approach to improve health was first mentioned in the Ottawa Charter[1]. This Charter describes the pivotal role that the settings approach has in shaping positive health outcomes for people and populations. The settings approach reflects an ecological model of health promotion that recognises that health is a complex interaction between environmental, organisational, and personal issues[2]. It involves a holistic view of health by creating supportive contexts within the places that people live their everyday lives[3]. Wellbeing is, like health, a contested concept, but is one that is closely entwined with the concept of health. Its two perspectives, hedonic wellbeing, and eudaimonic wellbeing[4] are reflected in this ecological model of supportive environments. This whole systems approach to health and wellbeing enables connections between people, their environments, and behaviours to be explored[5]. In the context of a Healthy University the whole systems approach is characterised by three overarching aims:

- creating healthy, supportive and sustainable learning, working and living environments for students, staff and visitors
- increasing the profile of health and sustainability in the university's core business – its learning, research and knowledge exchange
- connecting with and contribute to the health, wellbeing and sustainability of the wider community[6]

The underlying principle of settings for health is that investments in health are made within social systems in which health is not necessarily the main remit, for example higher education[2]. With more than 2.3 million students and 370,000 staff [7,8] the United Kingdom universities are ideal settings for

understanding and addressing health issues. Universities are settings that could adopt a whole system perspective, aiming to make places within which people, learn, live, work and play, supportive to health and wellbeing i.e. become a Healthy University[9]. The concept of a Healthy University in the UK, builds upon the success of other settings such as Healthy Schools and Healthy Cities. Encouraging universities to become healthier settings is gaining impetus at regional, national, and international levels. The call to action of the Okanagan Charter for Health Promoting Universities and Colleges is that health promotion be infused into the everyday operations, business practice, and academic mandates within the university[10].

The ideology of a health promoting university facilitates achieving higher education institution priorities, for example, the student experience. It also has the potential to contribute to the pursuit of major UK Government agendas on population health, young people and health, obesity, health related behaviours, climate and environmental issues[11, 12]. The UK Healthy Universities Network Self-Review Toolkit[13] was used to identify the health promoting activities within one urban UK University. The self-review identified that the student voice was not sufficiently captured for future meaningful action planning for the university's health promotion activities, in order to create a healthy and supportive environment for its students. This prompted a study of the health behaviours and health needs of the university student population. This understanding can inform the planning of future health promoting university initiatives, inform local health care services, and contribute to the universities' development of a whole systems approach. The student health and wellbeing behaviour survey reported here, has a particular focus on engaging student views and health behaviours that had not been completed previously. This paper presents a summary of key findings from this survey.

Method

The aim of the study was to examine the health behaviours of students in an urban university. Data gathered would identify the health needs of the students, and subsequently enable the university to tailor its health promotion activities and university policies (e.g. health and wellbeing policy) to its own student population. Using a health needs assessment stepped approach[14] an online 60-question questionnaire was developed containing predominantly closed questions. Open questions allowed the addition of any further information at the end of each section and topic area. The online questionnaire was designed and analysed using the software package *Qualtrics*. Online questionnaires allow a researcher to reach large numbers of people with common characteristics in a short amount of time[15] and eliminate the need to rely on other colleagues administering the survey in lectures or class sessions[16].

The questions focused on the following seven topic areas reflecting the national and local priorities[17, 18]:

- General Health Care Utilisation – the use of local services for advice and interventions
- Eating and Dietary behaviours
- Alcohol Behaviours
- Smoking Behaviours

- Sexual Health Behaviours
- Mental Health Behaviours
- Drugs and Substance Use Behaviours

The questions were informed by information from Student Services within the university about the types of student health seeking advice, and student evaluations and feedback of the services provided. Further resources to assist with the design of the questions came from reviewing the UK literature around other universities who may have done similar work for example Newcastle and Leeds Universities. The questionnaire was available online to 32,000 registered students during November 2014. 'Student' is taken to mean a higher education student studying at the university. The inclusion criteria were students on any course, full or part time, who attended the campus to study. The timing of the administration of the questionnaire was chosen as no other student focused activities were available during this period. The survey was released to the students using the university's central all students email address that contained information about the survey and an invitation to participate. It included a participation information sheet, which explained the purpose of the study and how the information would be gathered, stored and used plus issues of confidentiality. The design ensured that personal details could not be identified. The university Student Services department worked closely with the research team on the design and content of the questions to ensure that all students were able to participate. The survey was approved by the university Ethics Committee.

Results

In total 3683 students completed, the survey representing 10% of the whole student population and 3428 answered all the survey questions. The total number of students by year of study was, year 1 (n=1636), year 2 (n=952), year 3 (n=658), year 4 (n=208), and part time students (n=229) and they studied a wide range of subjects. The majority of respondents either lived in student halls or in student rented accommodation. The survey was completed by 2507 female students and 1162 male students and 14 who identified themselves as transgender or other.

The following is a summary of the key findings from the survey under each of the question headings. It should be noted that 93% of respondents answered every question; therefore, the findings are presented as numbers of respondents.

General Health Care Utilisation

The survey explored student behaviours in terms of use of local health services. Many of the participants in the study were living away from home in halls or, in student rented accommodation and would be advised to register with a local GP practice, whilst studying at the university. The survey found that 1426 respondents were not registered with a local GP whilst studying at university. Of these respondents, 563 were male and 859 were female. The most popular choice for advice or treatment for minor ailments would be family/friends and GP walk in centres. However, for those respondents not registered with a GP, (n=150), they would use Accident and Emergency Departments (A&E) as their first choice for consultation for minor ailments.

Eating and Dietary Behaviours

Students were asked about their eating habits and the findings indicate that 2227 respondents in the study prepare their own food. Male students tend to eat more takeaway food than female students, eat lunch outside the university, and eat breakfast away from their place of residence. However, female students consume more snacks than male students do, and in general, both male and female students tend not to eat breakfast. With regard to vegetable and fruit consumption 371 respondents eat more than five portions a day (One portion = one medium sized piece of fruit or 80 grams of any 1 vegetable). Consumption varied between 1-3 portions of fruit and vegetables, which was, consumed mainly by female respondents. Water consumption (one cup = 250mls) amongst the respondents was between 0-4 cups a day (n=2188) and is higher amongst female respondents. The types of healthy eating initiatives that respondents would like to see in university are free water fountains (n=2453), more healthy food options in the university canteen, Students Union shop, café bars and vending machines (n=1442) and some respondents would like healthy cooking classes (n=1322) on campus.

Alcohol Behaviours

Between 1-5 units of alcohol, a week is consumed by 375 male respondents and 1142 female respondents. However, 132 male and 126 female respondents consume more than 20 units per week. Getting drunk was the reason for drinking for 792 male respondents and 1700 female respondents. Alcohol is used by 364 male respondents to lower their stress levels and by 849 females. Respondents report having a "*better time when I am drunk*" (n=237 males and n=377 female). Whilst studying at university 1434 respondents find themselves unable to remember some of the night before due to alcohol consumption. When asked if they would like to drink less alcohol, 510 respondents said yes with a further 62 indicating that they intended to seek help for their alcohol consumption whilst studying at the university. In terms of support 1847 were not aware of where and how to seek support for helping reduce alcohol intake.

Smoking Behaviours

The majority of respondents (n= 2225) have never smoked and 980 are smokers. Nicotine cigarettes are used by the majority of smokers (n=681) and electronic cigarettes smoked by 79 participants. Cannabis with tobacco is smoked by 212 of smokers, and 136 respondents smoke Shisha. Of those respondents in the survey that do smoke, 524 indicate that they would like to give up smoking. The most preferred initiatives to help with this are smoking cessation sessions. Some respondents would prefer smoking cessation sessions during their day on campus (n=920).

Sexual Health Behaviours

The majority of respondents (n=2673) are sexually active. The number of respondents having 5-10 sexual partners a year whilst studying at university was shown to increase by year of study. Overall

respondents in the study said "*yes*" to using protection/contraception when having sex (n=1892), 335 saying "*no*" and 326 indicating "*most of the time*". Condoms and the contraceptive pill are the most common form of contraception used by the respondents and 66 would use emergency contraception. GP services for contraception are the most common choice for female respondents (n=1142) but less so by male respondents (n=210). The majority of respondents (n=1511) have been tested for a Sexually Transmitted Infection (STI) and these are mainly female. The survey found that 150 have been diagnosed with a Sexually Transmitted Infection (STI). These are mainly female (n=100) who report Chlamydia and Genital Herpes as the main types. Both male and female respondents (n=473) indicated occasions where they had sex and had been unable to remember it due to alcohol.

Mental Health Behaviours

The survey identified that 1015 respondents had an emotional or mental health difficulty whilst studying at the university, and 210 preferred not to say, indicating that this could be under reported. Of those respondents who reported having had an emotional or mental health difficulty, 756 are female and 255 are male and are not registered with a GP. Emotional and mental ill health difficulties were seen to increase by year of study. The most common form of medication taken by both male and female respondents are antidepressants (n=243), followed by anxiety medication (n=146). The use of anti-psychotic drugs was overall low in the survey (n=5), and were mainly male respondents. The number of respondents who have sought support for an emotional or mental health difficulty whilst at the university was less than those who indicated that they have had an emotional or, mental health difficulty. The feeling that they should be able to cope was the predominant reason for not seeking support (n=542) and embarrassment was given as another common reason (n=329). A lack of information was seen as another reason for 295 respondents not seeking support whilst in university.

Debt is the most common issue (n=486) which affects the mental health and wellbeing of participants at the university and is higher amongst female participants in the survey. Whilst lower than debt problems, the issue of prolonged internet use is one, which is also highlighted, in particular gambling related internet activities for 290 of the survey participants. The university website and email are also the most preferred ways for participants in the study to receive information about health and wellbeing services. The survey asked about other ways in which participants had found out about Student Support Services. The vast majority of responses to this question were via induction week and others such as welcome week. For participants who wish to make an appointment for student mental health services, 1964 would prefer to do this by email.

Drugs and Substance Behaviours

Whilst studying at the university 1027 participants have used either illegal or legal recreational drugs or, are currently using them. In the survey, 509 regularly use either illegal or legal recreational drugs and are mostly male. The survey indicated that the use of either illegal or legal recreational drugs also increases by year of study. The most common drugs used regularly are alcohol, Cannabis, Tobacco, MDMA, Cocaine, and Poppers. Participants were asked to specify any other type of drug they used which was not listed. These included Laughing Gas, Ecstasy, DMT, and Glue. A small number of

participants (n=16) of indicated that they had injected drugs within the last twelve months. No participants indicated that they shared needles. Participants usually obtain their drugs from friends (n=656) or alternatively a dealer off campus (n=426). When asked if they take drugs and alcohol simultaneously 84 said "*occasionally"* and 351 said "*yes* "and these figures were slightly higher amongst female participants. With regard to support services, 716 respondents would know how to access these for concerns regarding their drug use, and this is similar in both male and female students, and in all years of study. Participants indicated that they would like to have more information about the effects that drugs can have, in particular the effects of legal highs. This tends to increase again by year of study as second and third year students indicate, that they want more information about the effects of drugs and better promotion of services.

Discussion

One of the key issues identified in the North West of England is the misuse of A&E departments by university students[18]. Student attendances at A&E are reported as consistently high throughout the year and, of those students attending, approximately 80% are not registered with a local GP practice[18]. In addition, some students would present inappropriately at A&E for minor ailments. Ensuring students have access to the best and most appropriate healthcare is a crucial to the overall student experience whilst studying at university. Whilst fresher's week and induction programmes in the university promote student enrolment with local health services, some students clearly do not do this. Alternatives ways of engaging students with appropriate health services need to be considered throughout the academic year.

Transition from college to university presents challenges for university students, which may expose them to undesirable eating habits, poor nutrition and weight gain. Health-related habits formed during this period may be difficult to change later in life[19]. The links between cognitive performance and hydration are also well-documented[20,21,22]. The students in this survey tend to drink below the average recommended daily intake of water and are currently well below the UK Department of Health recommended five portions of fruit or vegetables a day[23]. This is despite health campaigns such as the UK 5 A DAY programme which young adults are aware of, but have a poor understanding of its detail[24]. The survey findings highlight a focus for university health promotion initiatives around healthy eating options, how to cook healthy food and the importance of keeping hydrated, which include the availability of free water through water fountains.

In the UK, the figures for binge drinking are higher amongst the student population[25] and the risk factors for later life and academic performance are well documented[26]. The female students in this survey who drank over 12 units a week and males students who drank over 20 units, may be said to binge drink. However, comparing these to figures for the UK, fewer male students in this survey binge drink compared to the UK average and slightly more females binge drink in comparison to the UK average[17]. A survey of 770 undergraduate students across seven UK universities recorded 61% who scored 8+ using the Alcohol Use Identification Test (AUDIT)[27]. In the context of this survey, this information is useful as the AUDIT survey indicated that two North West England universities scored

significantly higher in AUDIT scores compared to Midlands and Southern England universities and, increase in drinking behaviour amongst students living on campus were 2.5 more times likely to be AUDIT positive[28]. These figures give an indication of the problems related to alcohol in relation to the national picture. It must also be remembered that students with a hazardous alcohol consumption pattern are more likely to report smoking, illicit drug use and being sexually active[29].

There are very few prevalence studies, which have examined university students smoking behaviours in England, and therefore any direct comparisons with other HEIs is difficult. Most University web pages or reports focus on smoking health education related information for students. Smoking rates amongst students in this survey are similar to that of UK students in general[17]. The survey indicates students are more likely to smoke nicotine and are predominantly male students. This offers useful information for the tailoring of health promotion and health education initiatives in the university for specific audiences. Regular Shisha smoking is becoming almost as common as tobacco smoking amongst university students but students do not view it in the same way as smoking tobacco[30]. Shisha smoking and the levels of CO are very high with substantial toxin exposure and suggestions are, that universities may be seeing the start of a new form of smoking epidemic in the UK[31]. There is scope to promote stop smoking services, especially to students who stated they would like support to give up smoking. In particular, health education and health promotion initiatives need to consider the benefits of a complete smoke free campus.

This survey has highlighted the majority of students are sexually active. Whilst the incidence of reported STIs from the students in this survey is low, the fact that the majority of them have sought testing/screening should give rise to concern about the risky sexual behaviours amongst students. In particular, the survey indicates that the number of sexual partners that the students have increases by year of study. The evidence base for young people and sexual health accentuates the compelling links across other risk taking behaviours such as the excessive alcohol consumption. This has been highlighted within the survey where students combine alcohol and drugs with risky sexual behaviours. There is therefore, an argument for not separating university sexual health and alcohol interventions.

The university student population is particularly vulnerable to developing mental ill health, and the number of students in England and Wales who committed suicide between 2005 and 2011 rose significantly by 50% [31]. The report also found that just 0.7%, or 1 in 150 students, had disclosed mental illnesses to their higher education institutions in 2010-11. The Northwest of England has one of the highest average of mental health diagnosis compared to the England average[17]. This survey has highlighted that a large number of students are likely to suffer a mental health or emotional problems whilst studying at university, and this this increases by year of study. Many are likely to be female and not registered with a GP and will live in student accommodation. This has implications for those university staff responsible for students who live in university accommodation and for Student Services. Of particular importance, is the fact that the majority of the students who have reported an emotional or mental health problem whilst at the university have not sought support.

The combination of risky behaviours such as alcohol, drugs and substances and sexual behaviour amongst young people, in particular university students is well reported within the literature[32]. Furthermore, the ramifications of such behaviours and long-term health and wellbeing conditions is now a major public health concern[33]. Quite often students who engage in these risky behaviours also engage in other unhealthy behaviours such as poor diet, no exercise, lack of sleep, gambling[34]. Students in this survey indicate that they had used or were currently using recreational illegal or legal substances. The findings have implications for interventions, which aim to reduce impulsive and risky behaviour amongst drug and substance users.

It has been argued that health promotion in settings, or individually focused intervention programmes with defined target groups, has been often conflated with that of the settings approach[35]. Alternatively and in the context of this paper, working for better health using a settings approach does not preclude a focus on specific health issues and can therefore serve two purposes: addressing specific health problems and developing the problem solving capability of the organisations, involved in that setting[36]. Universities have a responsibility to facilitate student capacity to gain control over and improve their health and wellbeing. Adopting a Healthy University approach helped to identify a need to explore student health behaviour within the university, work towards a combined effort with representatives across the university to develop the survey, and work towards addressing local and national agendas on health and wellbeing in young people. This survey has not been undertaken on such a large scale within the university before and its findings will help the university progress towards its whole systems approach to becoming a Healthy University.

Limitations

The analytical tool in this survey did not allow us to differentiate between those who fully completed the questions and those who did not. We therefore do not know what influence the non-responses may have had on the overall findings.

Conclusion

Going to university is a transitional period that offers many good conditions for the acquisition of healthy lifestyles[34]. The concept of a Healthy University as a setting for the promotion of health and wellbeing underpins initiatives such as those, which seek to understand the health and wellbeing needs of its student population. This survey has examined the health and wellbeing behaviours of its own student population and has highlighted behaviours within the university that are similar to national averages, and some that are not. One of the key things it has been able to do for the university services and departments who support and develop student initiatives, is highlight very specific needs in terms of its own student population. This information will enable the university to tailor programmes and interventions aimed at specific groups of students at specific times in their time studying at university. It will be this information that will enable the university to work towards a whole systems approach to understand the distinctive needs of its own students, plan interventions and develop its policies accordingly.

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Conflicts of Interest
The authors declare they have no conflicts of interest

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