Students

Topic information	
Topic title	*Students*
Topic owner	*Hugh Porter*
Topic author(s)	*Jean Robinson*
Topic quality reviewed	*February 2016*
Topic endorsed by	*Student JSNA working group, January 2016*
Topic approved by	*Student JSNA working group*
Current version	*Date February 2016*
Replaces version	*Date 2012*
Linked JSNA topics	*Mental health, alcohol, tobacco, sexual health*

Executive summary

Introduction

University students make up a significant proportion of Nottingham City's population and are increasing in number. Their health needs have been assessed in partnership with the two universities and associated healthcare commissioners. The scope of this chapter covers students studying at either The University of Nottingham or Nottingham Trent University in full time or part time undergraduate and postgraduate 'higher' education on any University campus across the city and county. It includes students from the UK and overseas, those who originate from Nottingham and those who have moved to Nottingham to study. Students at the China and Malaysian campuses of the University of Nottingham are not included in this work.

Students have their own discrete preferences and constraints in terms of accessing services, preferred communication channels and identity. It is for these reasons that they are considered specifically here, rather than in each of the topic specific chapters.

Although generally in good health, students have particular health needs in terms of mental health, sexual health, smoking, alcohol and drug use and physical activity. There are also issues relating to access to health services, particularly for international students, who may be living in the UK for the first time and around the challenges of integrating large student populations into local communities.

There are separate chapters in the JSNA which consider alcohol, smoking, diet and nutrition and physical activity. Health needs of young people in general (including those in further education) in Nottingham are considered within the JSNA under specific topic

areas e.g. mental health, sexual health and substance misuse.

The university support services and specialist GP practices have built up a considerable body of knowledge about student health and wellbeing needs. Given that the student population makes up a significant proportion (15%) of Nottingham City's population, it seems reasonable that this expertise should be drawn upon commissioning the mainstream services that students may access.

Unmet need and gaps

What has changed since 2012?

- A new Eating Disorder in Students Service (EDISS) has been commissioned by Nottingham City CCG. EDISS is an education, assessment and treatment service, supporting early identification and intervention for mild to moderate eating disorders. The Service provides targeted and accessible 'drop-in clinics' located on the main campuses of Nottingham Trent University and the University of Nottingham.
- C Card registration has been aligned across City and County so that all young people up to age 24 years can access the service.

Unmet need and gaps

A significant proportion of Nottingham City's population are students in higher education. Whilst there is a common view that students are a relatively healthy population, there are characteristics of being a student in particular that may have a hidden impact on long term health outcomes if not managed appropriately. In addition it is important to ensure as far as possible that a student who has started a course at university, but who is at risk of dropping out, is supported to continue, given the positive association of higher educational achievement and better long term health outcomes.

The characteristics of the student population that may impact on their health outcomes are as follows:

Continuity of care

Students often live away from the family home during term time but move back home during vacations. These transitory living arrangements make accessing mainstream services more complicated. There are challenges of ensuring continuity of care between 'home' and university providers, particularly in terms of the management of chronic conditions such as mental illness, and it would be helpful if there were flexibility around waiting times and appointments that acknowledge the university timetable. University support services from both Nottingham Trent University and the University of Nottingham report that often students are offered appointments during vacation times when they would ordinarily return home, or that appointments are not flexible enough during for example exam periods. In addition, there are times when the duration of an intervention exceeds a semester, resulting in either curtailed treatment or having to start the referral, assessment and treatment process again in their 'home' location.

International students

There is a high proportion of students from overseas who may not fully understand how to access services in the UK or who may have cultural reasons for not wanting to, nor feel able to access services. There is some evidence that international students are under-represented in counselling services data for example and the 2011 Mental Health Needs Assessment undertaken at the University of Nottingham[1] indicated that there are barriers to accessing mental health support for international students and in particular those from China. For these students the tutor and academic staff support system is often seen as a more acceptable source of support but may not be the most appropriate.

Immunisation and vaccination

The close living arrangements of students means that infection control measures need to be given careful consideration. This includes access to vaccinations and screening as well as having outbreak management plans in place. There does not appear to be a system for ensuring MMR catch up for students studying at campuses outside the City. MenACWY vaccination is currently done on a good-will arrangement across the City practices. International students in particular may not have been routinely vaccinated in their country of origin. Students arriving from countries with higher incidence of disease such as TB need to be identified and immunised.

Registration with GP practices

The new academic year presents a significant amount of work for the main student GP practices. Up to one third of the practice list will leave at the end of the academic year and there will be up to one-third new patients that register at the beginning of the academic year. This mass-registration process again adds a layer of complexity to the assessment of health needs. Firstly, not all students will re-register with a GP in Nottingham when they leave home to study. There is some evidence to suggest that this may be particularly true of students with long term or enduring conditions. In addition, for those that do register in Nottingham, this busy period means that the needs of more vulnerable students may be overlooked. Although the majority of students are registered with one of three city practices serving the student population, a significant number will be registered with other practices in which they will not form a clearly identified sub-group, for instance students living at home in Nottingham that have stayed with their family practice and students at the satellite campuses in the county. It is important that these practices ensure the students under their care have good access to services open to students and that their immunisation histories are up to date.

Sexual Assault

National research commissioned by the National Union of Students[2] provided some evidence that sexual harassment and assault were an issue, particularly for female students. There is very little information on the extent of the problem locally or on the services available to tackle the issue.

Smoking

Students appear to have a low uptake of smoking cessation services based on a Health Equity Audit in 2015[3] and there has been a withdrawal of smoking cessation outreach support to the university campus health promotion events.

Alcohol and drugs

The prevalence of high alcohol consumption in student populations and the impact on student activities such as Welcome Week on the Nottingham night-time economy are significant. Research evidence suggests students are more likely than non-students to use ketamine. Data from Mosaic indicates that students are more likely to take cannabis and cocaine.

Data

Whilst undertaking this health needs assessment it was often the case that data on students was not specifically available. The current methods of using registration at the main GP practices and Mosaic segmentation to identify the student population presents limitations in terms of sensitivity of the data.

Recommendations

1) Establish commissioning links between the University Support Services (at the University of Nottingham and Nottingham Trent University), Nottingham City CCG and Nottingham City Council in order to secure a wider perspective on service planning and delivery.

Formalising a closer working relationship between the universities, local commissioners and providers of healthcare and Nottingham City Council in these areas is likely to be beneficial. This would ensure appropriate input when developing specific health strategies such as alcohol, smoking and mental health, would assist in the planning of services at key times that impact on Nottingham as a whole, such as Welcome week and would ensure appropriate input into community planning areas such as housing.

Mainstream care pathways do not currently acknowledge students as a specific group with needs in terms of timing of appointments, continuity of care across the academic year and cultural differences with the international students. This is most pressing in the area of mental health services including treatment for eating disorders but also for sexual health, smoking cessation and alcohol harm reduction services.

2) CCGs to consider how differences in service availability experienced by students registered with practices in Nottinghamshire County and Nottingham City could be taken forward.

Whilst each university considers its registered students as a single population, in practice the student populations fall into different local authorities and CCG footprints. Whilst the majority of students study and are registered with GPs in Nottingham City, a significant proportion study at two campuses in Nottinghamshire County i.e. Sutton Bonington and Brackenhurst and may therefore register with GPs in Rushcliffe CCG and

Newark and Sherwood CCG. The JSNA process could support commissioning by considering the needs of students as a specific population group in all relevant chapters.

3) Discussions with stakeholders at the two universities highlighted the need for improved communication between in-house university mental health advisors and counselling services and mainstream mental health services regarding service venues, clinic times, waiting list times and interventions offered. Universities would benefit from more effective communication from external services about changes to service provision and access. With on-going re-commissioning and restructuring of services, this is a particular difficulty.

The mental health services at the two universities do not feel that they have enough information to give to students who need to be referred to mainstream mental health services about what is available, when and where, particularly since mainstream services have been re-commissioned.

4) When commissioning services for student populations, the CCG should ensure equitable access across the two universities going forward. The benefits of extending the TB screening programme for new entrants to Nottingham Trent University should be considered.

5) A systematic procedure for ensuring all students have a complete immunisation history needs to be developed, particularly in relation to the MenACWY vaccine introduced in August 2015.

6) The recommendations from the Mental Health Needs Assessment of Chinese and Malaysian students[1] should continue to be incorporated in how both Universities engage with International students. This was a significant piece of work and highlighted important issues related to access to mental health services for students.

7) All partners, including the Nottingham City CCG, Nottingham University Hospital, the main student GP practices, EMAS and University Support Services should consider a mechanism for ensuring that better health intelligence about the student population is available for future needs assessments.

Future health needs assessments would be enhanced with more specific data regarding the student population. This could be made easier if there was a way of identifying individuals as students in routine data, by for example adding a 'student tag' (Further Education and Higher Education) in primary, secondary and tertiary care or by planning new data collection to capture student-specific needs for example through cross sectional surveys. Consideration could be given to the development of a demographic dataset provided by the universities containing age, gender, postcode, country or UK postcode of origin and ethnicity as a basis for future needs assessments.

8) The University of Nottingham and Nottingham Trent University should continue to provide culturally-appropriate information for home and international students about how to access health services in England and what health services are available and this should be supported by the local health services. In addition, students should be

encouraged to register with a local (Nottingham) GP practice in line with NHSE recommendations.

9) Both Universities should continue to raise awareness of alcohol and drugs harms and ensure students are able to easily access appropriate services. In addition, a review of the extent of sexual harassment including prevalence, level of reporting and services available is recommended with development of integrated and comprehensive interventions targeting young people in the university setting.

10) There is a need to ensure other relevant JSNA chapters consider students as they form such a significant section of our population to ensure that commissioning decisions consider the term-time / continuity problems encountered by students.

Full JSNA report
What do we know?
1) Who is at risk and why?

Why is the student population at risk?

Although generally a young and healthy population, there are several characteristics of the student population that distinguish them from young adults in the general population that may potentially make them more at risk of ill health.

- The student population is diverse in terms of the place of origin. This is of particular importance at the University of Nottingham which has campuses in China and Malaysia but both universities accept applications from across the world. Students from overseas may originate from countries with high TB rates, where diseases not endemic to the UK are common and where healthcare services are delivered in vastly different ways to the UK. Immunisation regimes in other countries may differ to those in England, leaving overseas students at risk from communicable diseases. The families of overseas students may suffer from social isolation and language difficulties and overseas students themselves may struggle with cultural barriers to engagement with student lifestyles.
- Once at the university, many students live in halls of residence. Both universities have invested a substantial amount of money in extending student accommodation over the last 10 or so years and as a result, more students are spending time together in shared areas. This in itself is a risk factor for the propagation of infectious diseases such as measles, meningitis and TB.
- Studying for a degree in itself brings emotional and social challenges. New students have often left home for the first time, are learning to manage their own finances, build new social networks and deal with academic pressures, all of which may impact physical and mental wellbeing. There is some evidence to suggest that pressure to excel in academic performance is leading to increased use of drugs to aid concentration such as Ritalin[4].
- Education providers now have a legal responsibility to students with disabilities, including those with severe and enduring mental illnesses, to make 'reasonable adjustments' in the academic setting and promote the equality of students and staff with disabilities. The Higher Education Statistics Agency (HESA) publish statistics on numbers of students in receipt of Student Disability Allowance[5]. DSA is available for students with long-term health conditions, mental health conditions and specific learning difficulty like dyslexia or dyspraxia that affects their ability to study.
- Continuity of services is a challenge since many students live away from home and move back there during vacation periods, particularly over the summer. This makes the student population relatively transient and has important implications for waiting times, waiting lists and the location of service provision that best meets the needs of the individual student. For some, returning home will be most appropriate whereas for others this may not be possible.
- There are lifestyle factors associated with 'student life' that may increase the risk of short and long term ill health as identified in the Health Needs Assessment of University Students in Newcastle (2012)[6]. These include alcohol use, smoking, low levels of physical activity and sexual health and will be discussed in more detail below.

What health challenges exist for the student population?

Mental Health

The Royal College of Psychiatrists has published a report on student mental health[7]. The authors of the report point out that the student population has changed enormously over the last decade. Overall student numbers have grown, more students are entering higher education from socially and culturally-diverse backgrounds and there are growing numbers of international students. Students are also struggling with rising debt and fewer employment opportunities[8]. Lesbian, gay, bisexual and trans (LGBT) students may be particularly vulnerable[9].

With the correct medical and psychosocial interventions students with mental health problems are still able to study at University. However, a Royal College of Psychiatrists report on student mental health has suggested that students who have severe mental illnesses are at considerable risk of academic failure and dropout[10]. Once enrolled at university, if a student has to suspend their course for treatment this can be costly to the individual, particularly if they have no additional income or benefits to support them during this time.

Prevalence of mental disorders; national and general population estimates

Student Population

There is a lack of data on the prevalence of mental disorders in the UK student population and a lack of agreement about how to define mental disorders in general. A comprehensive student health needs assessment undertaken in Leeds in 2004[11] suggested that at any one time, 20%-30% of undergraduate full-time students were above the clinical cut off for requiring counselling using the GP-CORE score. The study also found:

- Students identified as having high financial concerns possess significantly worse GP- CORE scores than students with low financial concerns.
- Students identified as perceiving high levels of pressure from paid work on studies had significantly worse GP-CORE scores than those students who perceived no pressure from paid work on their studies.
- Students with a positive perception of their social support network had a better reported psychological well-being than those with a less positive perception.
- Students from 'disadvantaged' socio-economic backgrounds (i.e. manual skilled and partly skilled) had worse perceptions of their social support network and worse psychological well-being than their 'advantaged' (i.e. professional or intermediate backgrounds) peers.

A study of UK students in 2008 suggested that 29% have clinical levels of psychological distress and that this was moderate to severe in 8% of them[12]. Eisenberg et al., estimated the prevalence of any depressive or anxiety disorder to be 15.6% in undergraduate students and 13% for postgraduate students in the USA[13]and estimates of the prevalence of eating disorders, again from other countries, ranges from 1.15% (Mexico, 2002) to 6.4% (Spain, 2002)[7]. Recent research suggests that prevalence of mental illness equalled those in the general population but only 5% were receiving treatment[14]

General Population

Common mental health problems

In the general population, common mental health disorders (CMD) such as depression, anxiety, phobias and obsessive compulsive disorder are very common with a prevalence rate in adults in England of 16.2%[15]. CMDs are more common amongst women than men (19.7% and 12.5% for all adults) and also vary by age; for the age group 16-24 (which includes the majority of university students), approximately 11% of men and 21% of women have a CMD.

Serious mental health problems

Psychoses are disorders that produce disturbances in thinking and perception, severe enough to alter perceptions of reality. They affect 0.4% of adults in England[16]. Women have a slightly higher prevalence of probable psychosis than men (0.5% and 0.3% respectively), with the highest prevalence amongst those aged 35-44 years. Prevalence also increases as household income decreases.

Eating disorders

According to the Adult Psychiatric Morbidity Study 2007[17] 6.4% of people surveyed and 20.3% of women aged 16-24 screened positive for an eating disorder i.e. were above the threshold for needing further assessment. Diagnosed eating disorders are known to be relatively rare in the general population as a whole. For anorexia nervosa and bulimia nervosa average rates of around 0.3% and 1% respectively have been found for adolescent and young adult women in European countries[18].

Lifestyle

Unhealthy lifestyle behaviours have been identified by numerous studies as being common in university students, including high levels of binge drinking, high levels of smoking, poor sexual health, and poor mental health. These topics are summarized below in the context of the student population and dealt with for the whole Nottingham City population within their respective chapters.

Alcohol, smoking and illicit drug use

Alcohol use by adolescents and young adults is increasing in the UK, particularly for young women[19] and this increase in prevalence of alcohol use above recommended limits is reflected in the student population[20, 21, 22, 23]. There is some evidence that illicit drug use increased in the university population between 1973 and 2002[24] and that whilst tobacco use has decreased in line with the whole population decreases, prevalence may be higher in some student groups[25]. Analysis of data from the Crime Survey for England and Wales (CSEW) 2010-2011[26] found students were 4.3 times more likely than non-students to have consumed ketamine in the last 12 months. Students who frequently visited clubs were 3.4 times more likely to take drugs than those who reported less frequent night-time activities[27].

Physical activity, healthy eating and weight

Despite the potentially beneficial effects of exercise on mental health, including in the student population[28], Dodd et al. found that in 2008, 70% of the university students sampled in the UK did not meet recommended guidelines of physical activity[29]. In addition, 66% did not eat at least 5 portions of fruit and vegetables per day. Other studies have reported

stress-related weight gain and weight loss in UK university students[30] and studies of body image perceptions have shown that, compared to other European universities, English students, particularly women, perceive themselves to be 'too fat' with related financial stress and poor quality of life[31].

Infectious Diseases

Meningococcal Meningitis

University students are considered to be a population at increased risk of invasive meningococcal disease, particularly in institutions that provide catered halls accommodation[32]. A study of over 2000 students at the University of Nottingham showed that the rates of carriage of the bacteria that gives rise to invasive meningococcal disease (Neisseria Meningitides) rise rapidly once term begins, from 6.9% on day 1 to 11.2% on day 2 and continuing to over 34% by Christmas[33].

Measles, mumps and rubella

This group of vaccine-preventable diseases is more likely to spread quickly in unvaccinated groups living in close proximity. There may be a small cohort of young adults that may have missed their second MMR vaccination owing to the time this was introduced, putting them at risk of potentially life-threatening infections, but most children born before 1996 should have had both doses. Overseas students may have lower vaccination rates than the home population.

Tuberculosis

NICE have developed guidance indicating that new entrants into the UK arriving from countries with a high prevalence of TB should be screened for active and latent TB and treated appropriately[34]. The guidance specifically includes students as an at-risk population, partly because of the close proximity of living arrangements.

Sexually transmitted infections and blood borne viruses

Data from the Health Protection Agency shows that young people (aged 15-24 years old) are the age group most at risk of being diagnosed with a sexually transmitted infection, accounting for 53% of new STIs diagnosed in GUM clinics[35]. Factors contributing to this increased risk in young adults include higher rates of sexual partner change and higher numbers of concurrent partnerships than in older age groups. Male students and hazardous drinkers were most likely to participate in unprotected sex and regretted sex. Female students and hazardous drinkers were most likely to experience an unwanted sexual advance[36].

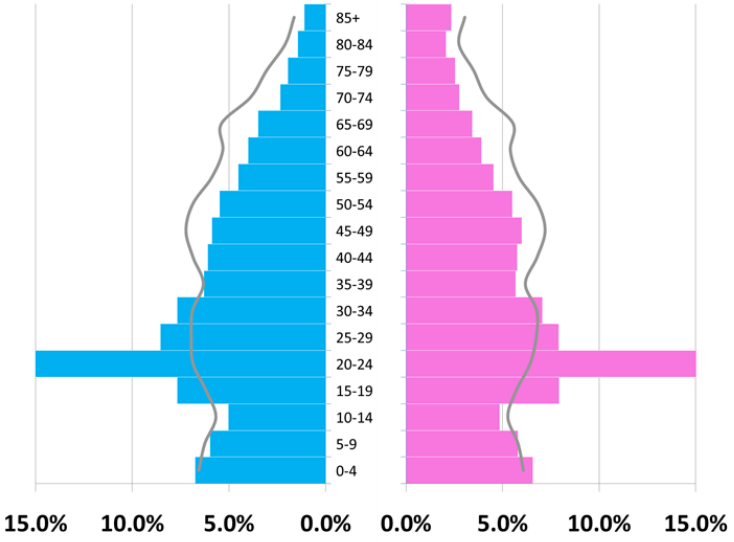
2) Size of the issue locally

Student numbers

There are approximately 60,000 students studying at the two Nottingham Universities, University of Nottingham (UoN) and Nottingham Trent University (NTU), of which 46,500 are undergraduates. Around 70% live in Nottingham City with another 7% each in the surrounding districts of Broxtowe and Rushcliffe. Approximately 15% of the Nottingham City population are students, compared to a national average of 3%[37]. This, in addition to inward

migration of young immigrants from Eastern Europe means that Nottingham City has a high proportion of young people (Figure 1).

Figure 1: Population pyramid comparing Nottingham City to England average. (Source: ONS Mid-year estimates 2014)



In 2013/14, across the two Universities there were 46,555 undergraduate students located on several different campuses (HESA 2013/14). Each academic year sees the arrival of over 11,000 new full-time undergraduates. The University of Nottingham has 4 main UK campuses University Park, Jubilee, Kings Meadow (mostly administrative) in the City and Sutton Bonington (in Rushcliffe). In addition, there are smaller campuses at Nottingham City Hospital, Derby, Boston, Lincoln and Mansfield. Nottingham Trent University has 3 main campuses: City, Clifton and Brackenhurst (Newark & Sherwood, see Figure 2).

Within the City, there are 4 wards where 45% or more of their population is made up of students; Arboretum (45%), Dunkirk & Lenton (66%), Radford & Park (51%) and Wollaton East & Lenton Abbey (63%). These 4 wards contain 60% of the City student population. Outside the City, the highest concentrations of students are in Beeston and Trent Bridge wards.

Table 1 Undergraduate and Postgraduate student numbers 2013/14

	University of Nottingham	%	Nottingham Trent University	%
Total number of students	33,270		26,845	
Full Time	28,895	87%	22,850	85%
Part Time	4380	13%	3,990	15%
Undergraduate	24,885	75%	21,670	81%
Postgraduate	8,385	25%	5,175	19%
United Kingdom	25,760	77%	23,140	86%
EU and Other international	7,515	23%	3,700	14%

Source: Higher Education Statistics Agency, 2013/14 (https://www.hesa.ac.uk/)

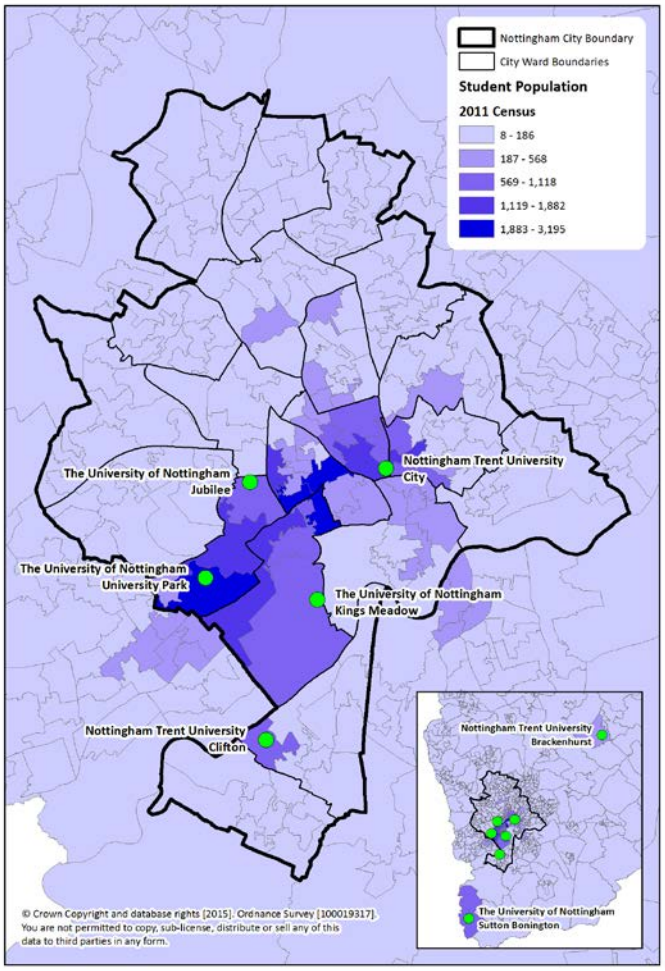
The profile of students at each university differs in some respects. Nottingham University

undergraduates are 78% state educated compared to 94% at Nottingham Trent. Only 19.7% of undergraduates at Nottingham University are from socioeconomic class 4-7[a] compared to 34.1% at Nottingham Trent[38]. University of Nottingham has a higher proportion of international students.

Student accommodation/area of residence

The students live in a mixture of purpose built student accommodation and the private rented sector. Based on 2011 Census data of student only households, most are concentrated in particular areas of the city, primarily in the centre and to the south west, in addition to the south and west conurbations of Beeston and West Bridgford which are located in Nottinghamshire county (Figure 2).

Figure 2: Map showing the student population by Lower Super Output Area and location of the main campuses. Source: Census 2011 data.



As there is no flag on the GP systems for 'being a student' these have been defined using the Experian Mosaic types J42 Learners and Earners ('Inhabitants of the university fringe where students and older residents mix in cosmopolitan locations) and J43 ('Students living in high density accommodation close to universities and educational centres') using the latest 2015 patient register data, the postcodes of where patients live and the Experian

[a] 4 Small employers and own account workers, 5 Lower supervisory and technical, occupations, 6 Semi-routine occupations, 7 Routine occupations

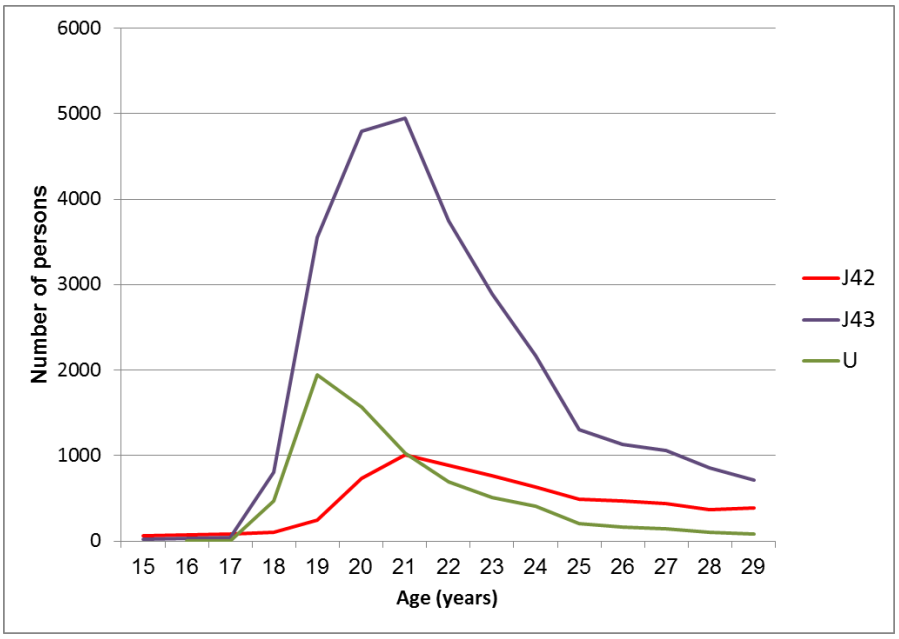
Mosaic postcode file. Of the 2 groups J43 predominates, forming 80% of the 2 types. The distribution is very similar to the Census 2011 data presented in Figure 2. The majority of students are registered with one of three City practices (University Health Service on Nottingham University Campus, Radford Medical Practice (one site in Radford and one at Nottingham Trent University city site on Peel Street) and Sunrise Medical Centre (sites in Clifton and Radford)).

Individuals belonging to the J42 type mainly live in private rented shared houses or converted flats and are categorised as being full time students who have moved out from the halls of residence, often living in poorly maintained private rented houses, more likely to be a smoker, on low incomes but in good health. Type J42 is also more likely to be living at home than type J43. More information is available in the pen portrait for this type, available here on Nottingham Insight.

Individuals belonging to the J43 type, by far the greatest proportion of the two J types are categorised as being full time students, normally in their first year at University, living in halls of residence, having low incomes, high use of pubs, and being receptive to the internet and national newspapers. More information is available in the pen portrait for this type, available here on Nottingham Insight.

Breakdown of the population by Mosaic group also shows a significant number of young people in Group U (Unclassified postcodes). Further investigation of the location of the postcodes attributed to this category revealed the majority to be halls of residence or student accommodation and so are clearly students.

Figure 3 shows the distribution of the Mosaic Types that are predominantly students in the registered population.

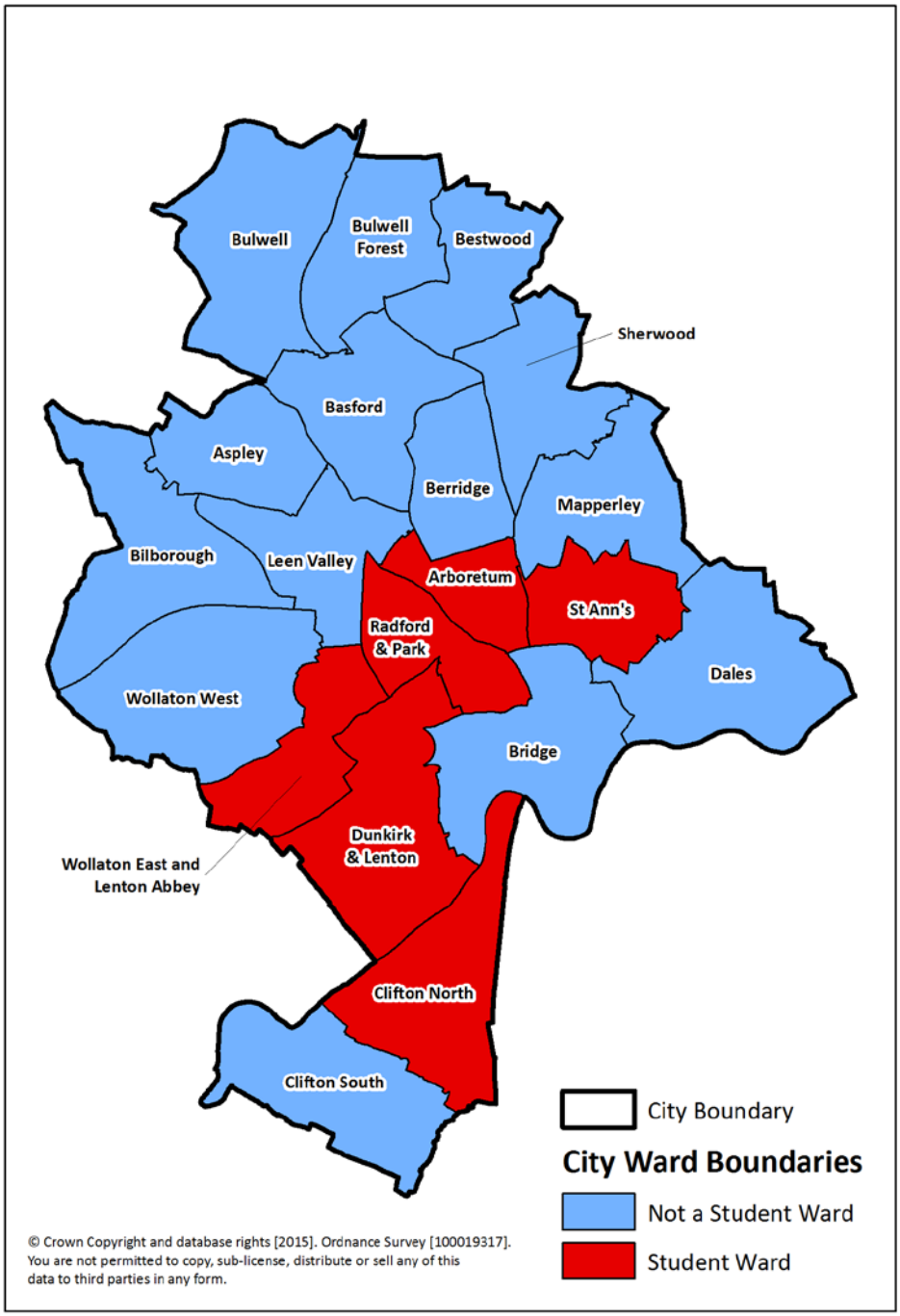


Source: GP Registered Population 2015 (City Residents only)

The distribution of the 18-24 year population and J42, J43 and U Mosaic Types identified wards with a high proportion of students (Arboretum, Clifton North, Dunkirk & Lenton, Radford and Park, St Ann's and Wollaton East & Lenton Abbey). These 'Student wards' have 39% of population aged 18-24 years and 66% of this population are Type J42, J43 or U. 'Non-Student wards' have 10.5% of 18-24 year olds of which only 8% are Type J42, J43

or U.

Figure 4 Map showing 'Student 'and 'Non–Student' wards in Nottingham City



Ethnicity

As shown in Table 1, the University of Nottingham has a higher proportion of international students than Nottingham Trent University (23% compared to 14%). The 2011 Census data (table 2) shows that student households have a higher proportion of people from an ethnic group. Chinese and Indian students are particularly well represented compared to the City

average.

Table 2 Ethnicity of Students compared to resident population in Nottingham City

Ethnic Group	Students %	Nottingham City %	Fold difference
White: English/Welsh/Scottish/Northern Irish/British	55%	68%	0.8
White: Irish	1%	1%	1
White: Gypsy or Irish Traveller	0%	0%	1
White: Other White	5%	5%	1
White: Total	**62%**	**75%**	**0.8**
Mixed/multiple ethnic group: White and Black Caribbean	3%	3%	1
Mixed/multiple ethnic group: White and Black African	1%	0%	
Mixed/multiple ethnic group: White and Asian	2%	1%	2
Mixed/multiple ethnic group: Other Mixed	1%	1%	1
Mixed/multiple ethnic group: Total	**6%**	**5%**	**1.2**
Asian/Asian British: Indian	6%	3%	2
Asian/Asian British: Pakistani	4%	5%	0.8
Asian/Asian British: Bangladeshi	0%	0%	0
Asian/Asian British: Chinese	8%	2%	4
Asian/Asian British: Other Asian	4%	2%	2
Asian/Asian British: Total	**22%**	**12%**	**1.8**
Black/African/Caribbean/Black British: African	5%	3%	1.7
Black/African/Caribbean/Black British: Caribbean	2%	3%	0.7
Black/African/Caribbean/Black British: Other Black	1%	1%	1
Black/African/Caribbean/Black British: Total	**8%**	**7%**	**1.1**
Other ethnic group: Arab	2%	1%	2
Other ethnic group: Any other ethnic group	1%	1%	1
Other ethnic group: Total	**3%**	**1%**	**3**

Source: NOMIS : Census 2011; Fold difference=Students/City proportion

Students with a disability

In 2013/14, both universities had 6.1% of full-time undergraduates in receipt of DSA (around 1,200 each). In addition there were 65 part time undergraduates, 35 at UoN (14.3% of part-time undergraduates) and 30 at NTU (4.7% of part-time undergraduates) in receipt of DSA (table 3).

Table 3 Students in receipt of Disabled Student Allowance 2013/14

	Total UK	University of Nottingham	Nottingham Trent University
Full-time undergraduate students	1,194,320	19,760	19,245
Number in receipt of DSA	81,455	1,215	1,165
Percentage in receipt of DSA (%)	6.8	6.1	6.1
Part-time undergraduate students	193,875	230	595
Number in receipt of DSA	6,665	35	30
Percentage in receipt of DSA (%)	3.4	14.3	4.7

https://www.hesa.ac.uk/pis/dsa © Higher Education Statistics Agency Limited 2015

Compared to the resident population, students are more likely to come from an ethnic group. Asian or British Asian are more prominent in the student population, especially Chinese due to Nottingham University links with China.

What are the health needs of students in Nottingham?

Mental wellbeing

Experian produce a 'grand index' of characteristics by mosaic type and group, based on key national datasets, survey data and other data held by Experian. This normalises the data for each group and type above and below and index of 100 for England. We can identify from this which mosaic groups or types are 'overrepresented' compared to the England average, for a particular characteristic, for example if a type had an index value of 150, it would be 50% more likely than the England average to experience the characteristic (e.g. to have depression/anxiety). The actual data, for example, the percentage of people who have depression or anxiety, are also available.

As an indication of the mental wellbeing of students (Types J42 and J42), the Mosaic Grand Index (2014) identifies Type J43 as over-represented as a segment that is typically in very good health, but also over-represented with self-diagnosed anxiety and depression. Type J42 are also over represented by those who consider themselves to be in very good health but also are over represented as segments of the population that self-medicate for insomnia, stress and anxiety and also self-diagnose as ADHD (Attention deficit hyperactivity disorder) compared to the norm. This is interesting in view of the fact that self-medication with concentration enhancing drugs such as Ritalin and Modafinil appears to be increasing[39].

Nottingham Citizens Survey data

The Nottingham Citizens Survey has been running for several years and collects a wealth of data about the city population including health and well-being Nottingham Citizens' Survey. Although the sample size is relatively small (about 2,000 per year, consistency over the last 5 years means it is possible to pool 5 years data and obtain more robust analyses. The survey incorporates the 14 questions of the Warwick-Edinburgh Mental Well-being scale (WEMWBS). The Warwick-Edinburgh Mental Well-being scale was developed to enable the monitoring of mental wellbeing in the general population and the evaluation of projects, programmes and policies which aim to improve mental wellbeing.

WEMWBS is a 14 item scale with 5 response categories, summed to provide a single score ranging from 14-70. The items are all worded positively and cover both feeling and

functioning aspects of mental wellbeing[40].

As participants are also asked about their employment status it is possible to identify students as a subset. Although numbers are small, pooled 5 year data allows some analysis of well-being in students compared to the general city population.

Between 2010 and 2014, 3,632 people aged 18-34 were surveyed, of whom 1,238 were students. The WEMWBS scores were grouped into 3 categories; good, average and poor mental wellbeing. Six percent of students (confidence limits 4.8% - 7.4%) were graded as having poor mental health compared to 8.9% (confidence limits 8.0% - 9.9%) of the general population of the same age, a significantly lower proportion of students with poor mental health compared to the general population.

Counselling services data

The Royal College of Psychiatrists[41] reports that on average, 4% of UK students are seen by a counsellor each year. In 2013/14, 1,959 students and staff had an initial appointment at the University of Nottingham Counselling Service (4.9% of the total university population). Of these, 65% were undergraduates. Both the number and the proportion of international students who attend UCS have increased steadily over the last few years – from 16% in 2005/06 to 19% in 2013/14.

For both the University of Nottingham and Nottingham Trent University, more women than men access the service (67.1% for UoN and 71.8% NTU). This is in line with the findings from the Leeds University Health Needs Assessment[42].

The demand on counselling services is not uniform throughout the year, increasing as the year progresses. For the University of Nottingham service, waiting times in 2013/14 were on average 6.2 days for the initial appointment. A trial of an on-line computer based counselling service was not successful (University Counselling Service Annual Report 2013-2014, University of Nottingham, 2015). At NTU, in 2013/14, the service saw 907 clients. Of these, 73% were female. International students accounted for 6% of clients.

Students can also access IAPT services through self-referral. There are currently 3 providers for City residents.

Mental health and international students; data from a mental health needs assessment at the University of Nottingham

In 2011, the University of Nottingham Student Support Services in collaboration with NHS Nottingham City undertook a mental health needs assessment of Chinese and Malaysian students[43]. The key findings were as follows (taken from the report):

- International students have greater support needs and need more targeted information in comparison to UK students.
- Students from mainland China have significant additional barriers to accessing mental health support compared with Malaysian and home students
- The project identified a complex range of cultural differences.
- In addition to the common challenges faced by all international students, Chinese and Malaysian students are facing particular barriers to seeking help. When seeking help, differences of culture and language are their major concerns.
- Stigma relating to mental health is a major barrier for many international students and is particularly acute within the Chinese and Malaysian populations.

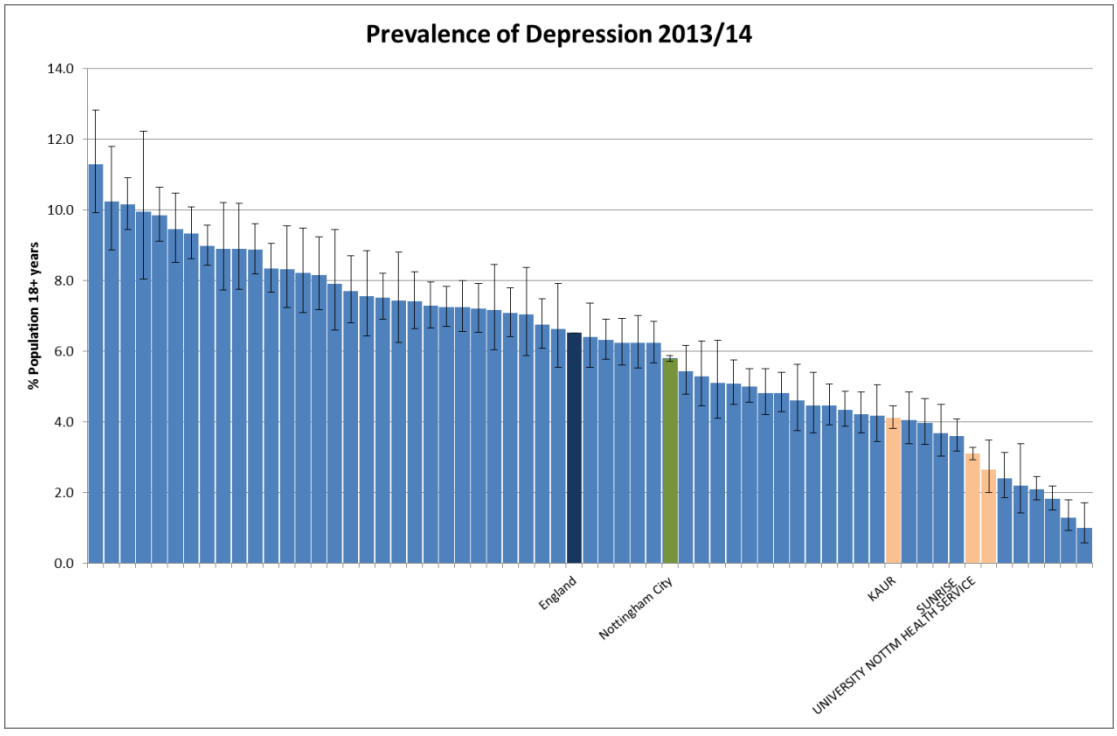
- The Tutor and Academic staff support system is perceived as the most important source of help and students made the most use of these services in comparison with other support services on campus.
- The University website and Welcome Week induction are vital information sources for Chinese and Malaysian international students in learning about support services before, and after, arrival.
- Good awareness of cultural differences for staff working with international students was identified as a particular need.
- Training in cultural beliefs and awareness, particularly for those involved in delivering health care to international students, needs to be given high priority and organisational support.

Common mental health problems

For the age group 16-24 (which includes the majority of university students), approximately 11% of men and 21% of women have a CMD. In Nottingham this would equate to approximately 7,500 undergraduate students. In one student practice, for which data was available, 15% of patients aged 18-30 were diagnosed with a common or severe mental illness.

Comparisons with all Nottingham City GP practices for 2013/14 show that prevalence of depression in the 3 university practices was lower than the city and national average (Figure 5). However, given the large number of students, the numbers with depression exceed 2,000 people and represent a significant health issue for these practices.

Figure 5 Prevalence of depression 2013/14 by Nottingham City Practice

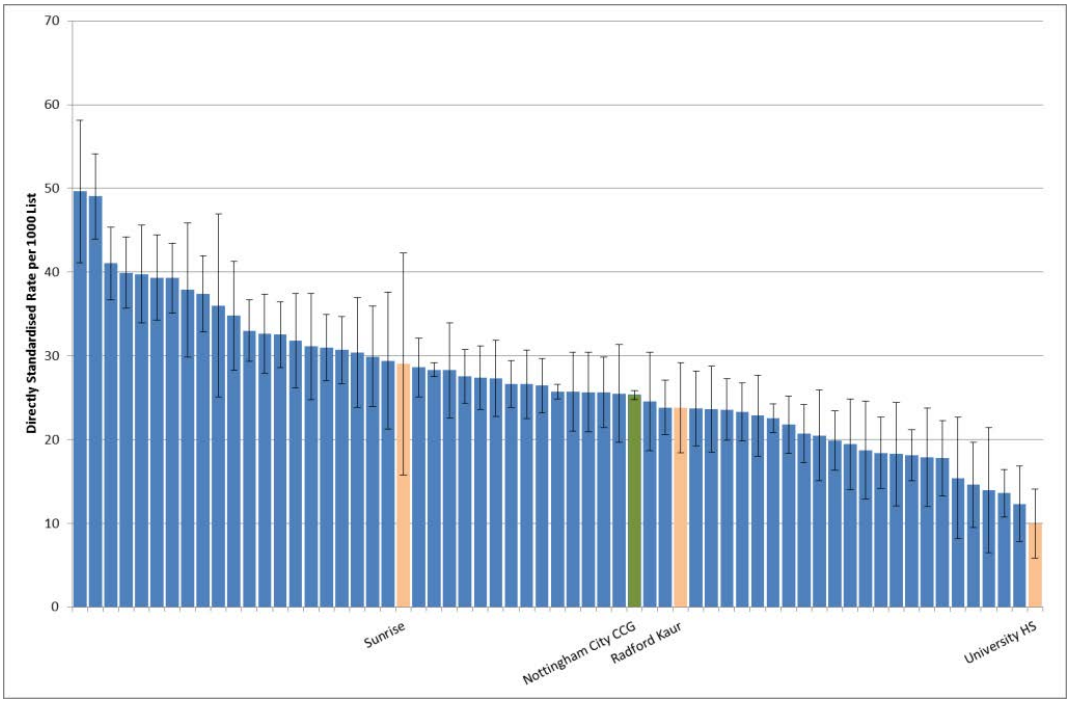


Source: Quality and Outcomes Framework (QOF) for April 2013 - March 2014, England

For all three student practices, prevalence had fallen compared to the previous year though this was related to increased list sizes rather than number of cases as the overall number increased from 1,788 to 2,017 persons.

Comparison of the rate of referrals to mental health teams across the university practices compared to Nottingham City practices overall shows a significantly lower rate for the University of Nottingham Health Service. Radford and Sunrise practice referral rates are not significantly different to the Nottingham population (figure 6).

Figure 6 All adult mental health referrals to mental health teams between June 2014 and May 2015



Source: eHealthscope (Nottingham City CCG Information Portal)

The rates of mental health referrals from the university practices may be lower than demonstrated by this data since both universities have in-house counselling services.

Whilst it is not clear what proportion of these were therefore 'diverted' away from referral to the mental health teams it is likely to have some impact. Also, even though the rate of referrals may be lower, the actual number is still likely to be high given the number of young people in the practice lists.

Serious mental health problems

Although students are not at particularly high risk, development of a serious mental health condition (schizophrenia, bipolar affective disorder and other psychoses) is likely to be deeply distressing and students will need a lot of support to come to terms and develop coping strategies. Access to treatment and management of crises may be complicated by access to referrals and appointments to suit the academic year. The Quality and Outcomes Framework for 2014 identified 168 people with serious mental illness and 2,474 with depression in the three student practices. These patients will not all be students but given the high proportion of students registered at these practices, it is likely that a significant proportion will be.

Eating disorders

Applying national prevalence rates to the local student population, it is estimated that there are approximately 4,725 female undergraduates living with an eating disorder including 70

with anorexia and 230 with bulimia.

In Nottingham City there were 76 referrals to eating disorders services (1.72 per 10,000 persons) between June 2014 and May 2015 of which 17% were referred by student practices. Again the contribution made by practice based Eating Disorder services for students is difficult to quantify.

Suicide

In the period 2011-2013 there were 43 deaths from suicide or injury of undetermined intent in Nottingham for people aged 15-44. The age-standardised rate was 10.4 per 100,000 people (95% confidence interval 7.4 - 14.18), which is similar to England as a whole (10.10/100,000; 95% confidence interval 9.9-10.4). Using the rate for Nottingham and based on a student population of 60,000 and without adjusting for the age profile of the university populations, we could reasonably expect up to 7 suicides in any 3 year period across the two universities. Examination of the Public Health Deaths Register revealed that there were 6 deaths from suicide or reasons undetermined as to intent between 2011 – 2013 to persons giving their occupation as student and registered with one of the 3 university practices suggesting that the rate in the student population is similar to the general population. This is not to say however that suicide is inevitable and it is essential that every effort is made to support at-risk individuals, however, this is a useful way to establish if there is a particular problem with suicide at the Universities, which does not appear to be the case. However, Suicide and undetermined intent was the greatest cause of death in students and it is perhaps notable that of the 12 deaths since 2007, 4 were young people from overseas.

Lifestyle

The Experian Mosaic Grand Index is able to provide some information on health and lifestyle behaviours of the two student types. In terms of their health, students (as defined as Mosaic types J42 and J43) are familiar with health websites such as NHS Direct. They are more likely than average to do nothing about a health condition or to visit a GP. There are more likely to eat fast food, smoke (though not heavily) and to drink alcohol. They are more likely to self-diagnose asthma and depression. On the other hand, they are also more likely to use smoking cessation services and to exercise.

Smoking

According to the citizen's survey, overall smoking prevalence for the City (2014) is 26%, which is high compared to the England average of 21%. The pooled data from the Citizens survey (2010-2014) shows students (Full-time education at school, college or university) aged 18-24 with a smoking prevalence of 19.1% compared to 26.9% for the general population of the same age suggesting that students are less likely to smoke than non-students.

Practice recorded prevalence rates are much lower than the average for Nottingham as recorded in the Citizens Survey. Whilst it may be that students do indeed have a lower smoking prevalence, it could also be that students take up smoking as they study at University (post registration when the data is mostly collected), or that students do not declare their smoking status at registration or alternatively it may also be that smoking status is not consistently recorded in general practice.

Using the classification of wards as student and non-student wards described on page 16,

recent data from the New Leaf service (2015) shows very similar quit rates for Student and Non Student wards (for clients age 18-24 years). For Student wards, 66% of those who set a quit rate were not smoking at 4 weeks compared to 67% across the City. However, only 6% of young people from student wards accessed the service over the 2 year period, compared to 28% of young people from non-student wards (City access rate 14% for 18-24 year olds). Local findings are in contrast to the Mosaic segmentation which suggests that student types are more likely to access smoking cessation. It may be the case that young people, as new smokers, are less motivated to quit while still at university.

The increasing use of shisha delivered to the home and in dedicated bars and restaurants, including an establishment directly marketed to students in Lenton, is an issue as is the low awareness of health harms amongst users (JSNA Smoking and Tobacco Control 2015).

Alcohol

According to the Citizen's survey (2010-2014 pooled), students have a prevalence of binge drinking higher than the City average, at 31.7% compared with 23.4%. According to the Experian Mosaic grand index data, types J42 and J43 are overrepresented for having drank alcohol 2 or 3 times a week with index values of 135 (34% prevalence) and 141 (35%) respectively, compared to a national prevalence of only 25%.

Information from one student practice found that 51% of those completing an alcohol audit scored more than 5, an indication of alcohol misuse (2015). Whilst the prevalence of students scoring over 5 is high, the screening tool is mostly administered during the first few weeks of term when traditionally socialising activities such as the Welcome Week are run, which may not be representative of the general alcohol use pattern over the duration of a degree course.

Return of students to Nottingham after the summer vacation

A 'task and finish' team was convened by the Nottingham Crime and Drugs Partnership to assess the impact of the student return to Nottingham on the 'night time economy' during Welcome Week, 2014 (previously Freshers' week). EMAS in particular noticed a 50% increase in activity above that expected, compounded by the fact that both universities returned in the same week. EMAS reported mainly alcohol-related incidents, though most were dealt with at the scene and did not require transport to hospital. This year (15/16) the student union put on a lot more events not based around alcohol. They were very well attended and received positive feedback. Promotion of healthy alcohol use by Last Orders was particularly high profile.

Illicit drug use

According to an earlier version of the Experian Mosaic grand index data, predominantly student types were overrepresented for having taken cannabis, with over 40% having taken it compared to a national average of 30%. When looking at whether these types had taken cocaine or not, the difference with the national average was even starker, with about twice the prevalence. However overall prevalence was much lower than cannabis use, with a national average of only about 6% of adults having taken it. (Source: Experian Mosaic grand index data 2010, available here on Nottingham Insight). In the 2014 Mosaic Grand Index, students were more likely to be in favour of legalising cannabis. No data were presented on drug taking habits.

Data from the Crime Survey for England and Wales show Nottingham has a high proportion of 20-24 year olds with frequent illicit drug use (45.5% compared to national average of 29.1%); 18 year olds are similar to the national average but 19 year olds are double the national average (7.5% compared with 3.9%)

We do not have information on how many of these students are taking drugs at levels harmful to their health, or how many could be estimated to need or want help.

A recent report in the Guardian Newspaper[44] has highlighted the increasing use of Ritalin as a performance and concentration enhancing drug though discussions with both university support teams did not find any local evidence that this was the case. Drugs commonly mentioned to the student support team by students included Nitrous Oxide, Ecstasy and NDMA. The student support teams were also concerned about the presence of 'Head shops' in the city selling legal highs to students.

Nutrition, physical activity and obesity

According to the Experian Mosaic Grand Index data, types J42 and J43 are underrepresented for being classified as obese (with index values of 46 and 14 respectively), and overrepresented for doing exercise for 2-4 hours per week (index values of 158 and 134). Type J43 is under-represented for consuming at least 5 portions of fruit and vegetables a day (index values of 78) though Type J42 is close to the national average. (Source: Experian Mosaic grand index data, available here on Nottingham Insight). This would appear to indicate that with respect to nutrition, physical activity and obesity students are healthier than the general population.

Data from the GP practices are in agreement with the Mosaic data in that generally, the student population are of a healthier average weight and BMI than the general population in Nottingham partly because they are younger and also reflecting their more affluent socio-economic status and level of education.

Infectious diseases

a) Meningococcal Meningitis and Measles, mumps and rubella

Although rare, the consequences of Meningitis can be severe. There were 724 confirmed cases of Meningitis in England in 2014/15 of which 106 (15%) were in young people age 15-24. The incidence of Meningitis has declined significantly since the introduction of the MenC vaccine in 1999. However an increase in the incidence of MenW cases has led to the introduction of MenACWY conjugate vaccine to the national immunisation programme in England. MenACWY vaccine replaced the existing time-limited 'freshers' programme from August 2015[45].

There were only 161 notifications for Measles (10% of the total) and 46 notifications for Rubella (German Measles, 12% of the total) in England in 2014 in young people over 15 years. Mumps was more common with 4,955 notifications in England in over 15 year olds (70% of the total).

Due to the high risk of infection imposed by large numbers of young people living is close proximity, both Universities have Meningitis and MMR vaccination programmes for newly registered students. In addition the Universities and Nottingham City CCG have agreed an outbreak management plan in the event of an outbreak of infectious disease.

b) Tuberculosis

Screening the student population for TB, University of Nottingham

NICE guidance recommends that any new entrants into the UK from countries with high TB incidence be screened for latent TB. There are a significant number of university students from high risk countries but because these are often low risk (wealthier) students it is unlikely that they present a significant public health problem in the UK.

However a Nottingham City stakeholder group was convened and it was agreed that the following students should be offered a TB screen:

1) Any student studying for any length of time entering from a sub-Saharan country.
2) Any student entering from a high prevalence country (>150 cases per100,000 population)

and

3) Studying for >4 years should be offered the screen. This will include medical, veterinary, architectural and engineering students and may also include some postgraduate students.

A checklist was prepared for international registration to identify eligible students and obtain contact details. Students were then referred on to specialist TB services at City Hospital for screening. It is hoped that screening clinics will be held on the university campus. Screening will include students at the Sutton Bonington campus as they will register on the main campus. Nurses and medical students are all screened through occupational health.

It is intended that the screening will extend to Nottingham Trent University in the future although the need is lower there due to fewer overseas students attending.

Sexual health

Nottingham has one of the highest Sexually Transmitted Infection (STI) rates in England (28th /326 local authorities). There were 4,597 new STIs diagnosed in residents of Nottingham, a rate of 1,479 per 100,000 residents (compared to 797.2 per 100,000 in England). Of these, 53% of diagnoses of new STIs in Nottingham were in young people aged 15-24 years (compared to 46% in England**)** some of whom will have been students[46]. Data from the Public Health England shows that young people (aged 16-24 years old) are the age group most at risk of being diagnosed with a sexually transmitted infection, accounting for 57% of all chlamydia, 51% of genital warts and 38% of gonorrhoea infections diagnosed in genitourinary medicine clinics across England in 2014[47]. In Nottingham, young people account for 59% of all chlamydia, 63% of genital warts and 51% of gonorrhoea infections; a proportion of these will be students. Factors contributing to this increased risk in young adults include higher rates of sexual partner change and higher numbers of concurrent partnerships than in older age groups.

Analysis of GUMCAD data (statutory submission of Genito-Urinary Clinic activity) provides information on attendances at GUM for sexually transmitted disease by small geographical areas. This allows analysis of ward level data which can be aggregated into student and non-student wards (see p16 and figure 4).

Young people aged 18-24 account for 42% of GUM activity in Nottingham City (2014/15) with around 14,000 attendances per year. Young people from the Student wards account for 44% of all attendances in this age group. In terms of population, the activity rate per 1000 population for the student wards is about half the activity rate for non-student wards (162 per 1000 compared to 338 per 1000). This may in part be due to the availability of sexual health services in the student GP practices.

Chlamydia
The most common sexually transmitted infection in young people is genital chlamydia. In 2014, 22,446 young people aged 15-24 were screened in Nottingham City as part of the national Chlamydia screening programme and 9% of screens were positive (LASER Report, 2014). This compares to a national positivity rate of 8.3%.

Analysis of GUMCAD data at small area shows Chlamydia rates to be lower in the student wards compared to non-student wards (4.8 per 1000 18-24 year olds compared to 11.7 per 1000). However, the small area data does not include data from GP practice based services.

The Public Health Outcomes Framework includes an indicator to assess progress in controlling chlamydia in sexually active young adults. This recommends local areas achieve an annual chlamydia diagnosis rate of at least 2,300 per 100,000 15-24 year old resident population. Nottingham currently exceeds this target with 2,807 per 100,000 screened in 2014 (PHOF, 2015).

Data from Preventix for 2013/14 (on line / postal chlamydia screening service) showed return rate was very similar for both student and non-student wards (73% and 71% respectively). Uptake of the service was lower in the student wards – 36 requests per 1000 compared to 52.4 per 1000 for non-student wards.

The proportion of Chlamydia tests that are positive for the three main university practices is 2.8% for University of Nottingham Health Service (63 positive screens), 7.14% (one positive screen) for Radford and 10.6% (16 positive screens) for Sunrise. This compares to an overall positivity rate of 9% for Nottingham City. However, not all students will go to the GP practice for Chlamydia screening as it is available from a range of providers, including pharmacists, antenatal classes, CASH services and on line (Preventix).

Other Sexually Transmitted Infections (Genital warts, Gonorrhoea, HIV)
STI infection rates are not specifically recorded in students. The JSNA chapter on sexual health and HIV contains more information about sexual health in young people generally.

Emergency contraception
Data is available for emergency contraception provided by CASH services but the numbers are relatively low. Data from Contraceptive Services (SRHAD) dataset recorded 375 episodes where emergency contraception was provided to Nottingham City residents aged 18-24 years between April and December 2014. The crude rate (emergency contraception per 1000 persons 18-24) was much higher in student wards (5.3/1000) compared to non-student wards (0.7/1000). Locally there was a suspicion that some ethnic groups have fewer prescriptions than others but it was not possible to demonstrate this with the available data.

Sexual assault
According to the Experian Mosaic Grand Index data, types representing students are both overrepresented for being insulted, pestered or intimidated, with indexes of 146 (21.3%) and 132 (19.2%) respectively. Also national research 'Hidden Marks' commissioned by the National Union of Students[48] shows that more than one third of the women students surveyed reported they sometimes felt unsafe when visiting their university or college

buildings in the evening, compared to the 97% that always or mostly felt safe during the day. One in seven survey respondents had experienced a serious physical or sexual assault during their time as a student. Over two thirds of women students (68 per cent) have experienced some kind of verbal or non-verbal harassment in and around their institution. This kind of behaviour – which includes groping, flashing and unwanted sexual comments – had become almost 'everyday' for some women students. Twelve percent of respondents reported being subject to stalking and 16% have experienced unwanted kissing, touching or molesting during their time as a student, the majority of which has taken place in public.

This was followed up in 2013 by 'That's what she said: Women students' experiences of "lad culture" in higher education'[49] and a further report in 2015, Lad Culture Audit Report[50] which carried out an analysis of existing policies, training, education and support services in place within Student Unions and institutions to tackle lad culture.

There is a clear link between alcohol and risky sexual behaviour. Male students and hazardous drinkers were most likely to participate in unprotected sex and regretted sex. Female students and hazardous drinkers were most likely to experience an unwanted sexual advance. Results of the survey indicated a need for integrated and comprehensive interventions targeting young people in the university setting[51]

Use of the Emergency Department (A&E)
The University Health Service has significantly lower than average attendances at A&E while the Sunrise and Kaur practices have similar rates to the average. In terms of work load because of the high numbers of students in the city, the three practices account for 9.6% of A&E attendances (8,500 attendances per year; *Source: eHealthscope, NHS Nottingham City Information team).*

3) Targets and performance

There are no specific national targets relating to students but students are an important section of the population in relation to performance across health and social indicators.

4 Current activity, service provision and assets

4.1 Mainstream services commissioned by the NHS or Local Authority Public Health

Students in Nottingham are able to access to the full range of NHS services available to the general population, including

- Primary care GP services including referrals to specialist outpatient services via GP referral, including specialist mental health services.
- IAPT (Improving Access to Psychological Therapies) counselling services
- Out of hours GP services provided by NEMS on Derby road
- NHS 111 Call 111 24 hours a day, 365 days a year to reach a full range of local health services, including out-of-hours doctors, community nurses, emergency dental care and late opening chemists.
- NHS Urgent Care Centre, Seaton House, London Road, Nottingham NG2 4LA (next to the BBC building). The centre will offer assessment and treatment for health

conditions that are urgent but non-life threatening such as: Minor burns and scalds, Minor head injury with no loss of consciousness, Skin infections and rashes, Suspected broken bones, sprains and strains (X-ray will be available on-site), Eye infections and minor eye injuries. No appointment is needed; just drop in between 7am and 9pm 365 days a year.

- Emergency Department (A&E) at QMC
- Smoking cessation services via New Leaf (please see 'current services' section of smoking JSNA chapter for more details).
- Pharmacy Services: Pharmacists are highly qualified healthcare professionals, who offer a wide range of services including advice on medicines and other health problems. A pharmacy is often the first point of call for health needs and it could save a trip to a GP.
- Dentists and Opticians
- Sexual health service providing contraception and testing and treatment of symptomatic but uncomplicated sexually transmitted infections. There is also an asymptomatic screening service available at the practice and at health promotion road shows in halls of residence. Sexual Health Services provided in a range of locations across the City including GUM at City hospital and the University Health Service at Cripps Health Centre on the Nottingham University campus.

Primary Care

There are 3 main student practices in the city:

- University of Nottingham Health Service [C84023], Cripps Health Centre (Nottingham University Park), list size 36,496 as at June 2015.
- Sunrise Medical Centre [C84714] (2 branches, Radford Health Centre and Nottingham Trent University Clifton campus), list size 6,262 as at June 2015.
- Radford Medical Practice [C84117] (2 branches, Radford Health Centre and Nottingham Trent University, Peel Street, City centre), list size 16,067 as at June 2015.

These practices register full time students from University of Nottingham and Nottingham Trent university and have a very high proportion of people aged between 18 – 24 years (in excess of 65% of the total list). An additional 4 practices have higher than average proportions of young people (15-22%) some of whom are likely to be students and account for a further 5,000 young people. Students at the Sutton Bonington campus of the University of Nottingham tend to register at the Orchard Practice which is in Nottinghamshire County. The practice has 8,300 patients registered of which 13% are age 20-24 year. Students at the Brackenhurst campus tend to register at Southwell Medical Centre, Southwell, which again is part of Nottinghamshire County. The practice has just under 12,000 patients of which 5.2% are age 20-24 years.

University of Nottingham Health Service offer extended appointments (after 6.30pm) and at weekends. It has a dedicated website which enables students to register online, book an appointment, request repeat prescriptions, and offers a lot of information on how to access different services such as contraception or immunisations. There is also a dedicated section of the website for international students, which explains the NHS system in detail for students which should help to avoid confusion. They have close links with the university

based services such as counselling and the Mental Health Advisory Centre. The practice was rated *outstanding* by the CQC in 2015.

The Sunrise Practice (Clifton site) offers appointments until 6.30pm on 4 days of the week. An extended hours surgery is provided on a Wednesday evening. The practice has a dedicated website which offers instructions on how to register, make an appointment and request a repeat prescription and these are available on line. The website has a section for non-English speakers. The practice also offers access to the C Card scheme and provides a level one sexual health screening service. The practice also has on site physiotherapy service and counselling service provided by a third party. Eating disorder support services are also now available on the Clifton site.

Radford Medical Practice is open until 6.45pm at the Student Health Centre during term time and 5pm out of term time four days of the week. The Practice closes at 1pm each Thursday. There is a dedicated website which offers useful information about NHS services (which would be useful to either home or international students navigating the system for the first time). There is an option to translate sections within the website into other languages and a dedicated section explaining how the NHS system works. The Practice offers online requests for repeat prescriptions as well as online appointment bookings. The Practice offers a drop session for full sexual health screening and free condoms. An eating disorders service, EDISS, is also available.

Orchard Practice (Sutton Bonington Students; Rushcliffe CCG)

There has been a problem with appointment making because the practice is closed on Wednesday afternoons which is when the university doesn't schedule lectures and the only time vet students can make appointments easily. However they now offer a Saturday morning clinic and discussion with the practice manager revealed that students can go to the Gotham practice on Wednesday pm if they need to. **http://www.kegworth.net/**

Southwell Medical Practice, Newark and Sherwood CCG

The practice is open until 6pm every weekday except for one Wednesday afternoon per month. There is a practice website here for patients but no specific advice for students.

Increasing Access to Psychological Therapies (IAPT)

In Nottingham, the IAPT programme is delivered as a stepped care model (steps 1-5). Steps 1-3 are for people with common mental disorders and are delivered by GPs and Lets Talk Wellbeing which is a partnership between Re-Think and Nottinghamshire Healthcare Trust. Steps 4-5 are for people with severe and enduring mental health problems and are provided by Nottinghamshire Healthcare Trust. It is important when monitoring service provision to bear in mind the needs of students, particularly in relation to waiting times and offers of assessments and appointments during vacation times.

Specialist mental health treatment services- please see 'current services' section of adult mental health JSNA chapter.

Specialist sexual health services- please see 'current services' section of sexual health and STIs JSNA chapter.

Specialist drug treatment services- please see 'current services' section of substance misuse JSNA chapter.

Specialist alcohol treatment services- please see 'current services' section of alcohol

JSNA chapter.

Eating disorders

Following a successful pilot, Nottingham City CCG has commissioned an Eating Disorder in Students Service to provide early support and intervention for students with mild to moderate eating difficulties and disorders. The service is currently provided across both universities by First Steps. Weekly drop-in sessions are available at Cripps Health Centre on the University of Nottingham campus and at the George Elliot building on the NTU Clifton campus (First Steps Leaflet).

Specialist eating disorder services (for more severe conditions) are based at Mandala centre. Continuity of support between the University and the specialist service can be a challenge based on the student specific issue of having a 'home' and university base. There are no inpatient beds in Nottingham; these are commissioned from Leicester University Hospital.

Other mental health services

A consultant psychiatrist delivers a full day session on Fridays for staff and students. For people with more than significant mental health problems that have not responded well to treatment, have ongoing psychosis, severe depression, personality disorder, anxiety or ADHD.

Term Time, transition to adult services and access to services

Referrals to secondary care can be problematic for students as by the time they are offered an appointment, they may have travelled home for the vacation.

In addition, students with existing conditions cannot register with a practice until they arrive at university causing further delays in accessing secondary care services. Delay can cause serious problems in continued access to drugs and treatments.

A survey of Diabetes care in UK universities[52] found that students felt their diabetes care deteriorated at University with communication between GPs and specialists and access to prescriptions particular issues. It is likely that students with other long term conditions face the same problems.

4.2 Services commissioned and provided by the Universities to meet the needs of students

4.2.1 University of Nottingham

Mental health advisors

Specialist mental health advisors can if necessary intervene at a time of crisis and can help support students with longer-term mental health problems. The importance of this role is endorsed by the Royal College of Psychiatrists' 2011 report[53]. The advisor works closely with the GP services, disability support and counselling services along with 'mainstream' mental health teams.

Mental Health Services at the University of Nottingham

Early intervention and psychosis

There is a good model of working with the early intervention and psychosis team. This team is for people under 35 with a first episode of mental ill health and is aimed at reducing the

risk of establishing a long term problem. The service is reported to work well with the student's 'home' team and work flexibly with the mental health advisor.

However, there are reported to be challenges encountered by students when they go home as they often have to go onto new waiting lists, may not receive continued services or receive a different type of service.

Part of the mental health advisor role is to undertake mental health promotion work and this is done in partnership with the early intervention and psychosis team.

Counselling services
The University of Nottingham counselling service is funded by the university and is free to all staff and students, (undergraduate and postgraduate) It runs a trainee placement scheme but does not have volunteers and staff who work in the service are members of the BACP and UKCP professional bodies. In April 2014 the University's Executive Board granted a funding bid to develop the role of Associate Counsellors – a bank of professionally trained and accredited staff who could work term time and offer flexibility at times of peak demand. The service is fully integrated in that it is open to staff and students, including 3 month transition periods after people leave or if a student is for example suspended from the university for a year but plans to return[54]. Initial appointments are offered within a week of contact. Over half (53%) of clients were offered an on-going appointment within 4.0 weeks of their initial appointment; 95% of staff and students were offered an appointment within 12 weeks of their initial appointment.

Referrals come from students themselves (self-referral), tutors, hall wardens and GPs. Referrals go to the University of Nottingham Health Service mental health advisor, the disability team and the early intervention psychosis team, the Eating Disorders service for students who have a BMI under 17 or other risk factors.

Chaplaincy
The service is funded through the churches and voluntary sector. It is a multi-faith and non-faith service with strong connections into the local community and its communities of faith. It can advise on local places of worship; student faith societies and how faith interacts with academic life. There are rooms available for worship across all campus sites.

Disability Support
The disability support unit provides support for students with a range of disabilities including long term conditions, visual and hearing impairments, ME and chronic fatigue and mental health. Each faculty appoints a Disability Liaison Officer (DLO) to provide a point of reference, advice and guidance for members of staff and students in the School about disability issues and support. The DLOs are part of a network that meets regularly to share information and good practice. DLOs liaise with Disability Support and Academic Support, as necessary, in relation to individual students and general policies and procedures. At the University of Nottingham the service is on the main university park with sessions at the other campus sites.

Health Promotion
The Health Promotion Advisor at the University of Nottingham ensures the delivery of health promotion interventions across its 3 campuses through the *HealthyU* initiative.

Health Promotion Plan, objectives and activities.
The health promotion action plan has 5 main themes include healthy eating, mental health and wellbeing, alcohol, drugs and tobacco, sexual health and physical activity.

Activities include:

- *HealthyU* hall road shows - students in halls can access services information and support from University and local services.
- Oversee and co-ordinate the c-card scheme for the University and the University of Nottingham Health service. The HPA also registers students onto the scheme.
- Campaigns relating to alcohol, mental health, sexual health and sexual consent, men's health for example, WAD, Movember, Sexual Health and Guidance week, University mental health day and exam stress
- Develop health promotion resources on alcohol, drugs, sexual health, a guide to the NHS for international students, sexual health guide for international students, sexual consent, healthy eating, chlamydia screening etc.
- Has provided all information on the Inform the student communications team of any updates to the HealthyU website.
- Co-ordinate HealthyU week (a week of activities aimed at promoting health and well-being) the University Health registration fair, fairs in schools and other venues.
- Support and work with the Student Union Welfare officer at University Park and the Guild at Sutton Bonington with any health promotion campaigns for example sexual health week, mental health week.
- Deliver a sexual health drop-in for students at Sutton Bonington.

Sexual health services and health promotion
The University Health Promotion Specialist oversees the C Card Scheme (commissioned by Nottingham City Council) for the University and the University Health Centre. Students can register to join the 'C Card' scheme which then enables them to pick up free condoms from various sites across the City.

The University of Nottingham Health Service is a level 2 sexual health service (commissioned by Nottingham City Council) providing contraception and testing and treatment of symptomatic but uncomplicated sexually transmitted infections. There is also an asymptomatic screening service available at the practice and at health promotion road shows in halls of residence.

The emergency hormonal contraceptive pill is available at the University of Nottingham Health Service and at Boots and there has been an increase in implanted (long acting) contraceptives over the last few years.

There is some concern that Chinese women may not be accessing contraceptive services and may be accessing termination more although there was no clear evidence of this in the current needs assessment. A drop in clinic for Chinese women was piloted by the Health Promotion Advisor at the University of Nottingham but uptake was poor even when extended to include all international students. Funding has been provided by NHS Nottingham City to develop a sexual health leaflet entitled: *The NHS and Relationships - a guide for international students*. This has been well received and is available to international students through the international office at *HealthyU* events and when they sign up for c-

card.

There are a number of sexual health screening events throughout the year including events target at the LGBT community, for example HIV fast-testing delivered by the Contraceptive Sexual Health Screening Service.

Chlamydia screening is available through a range of channels and Nottingham City meets its targets in this area with a better than average positivity rate.

Sexual Assault
University of Nottingham website: Student Support pages are easy to find, has a sex and relationships page with focus on contraception and sexually transmitted infections, publishes contact details for rape and sexual assault and has a useful links section. There was little on dealing with sexual harassment but this is being addressed by an updated code of conduct and dignity policy which is under development. Also covered on Domestic Violence page which also included a section on male behaviour (White Ribbon campaign)

Alcohol harm
During 2014-2015 the University of Nottingham Students Union and the University of Nottingham were one of 7 Universities chosen to pilot the Alcohol Impact scheme, (funded by the Home Office during its pilot year) which aimed to create a positive culture of responsible drinking and helps students' unions and universities to promote responsible behaviour on campuses and in communities and improve the health and wellbeing of students.

Alongside responsible drinking the Students Union set up and promoted a safe taxi scheme, which ensures students are able to get home safely at a fixed price.
The University of Nottingham Students Union and the University of Nottingham were successfully awarded an alcohol Impact mark of accreditation from The National Union of Students (NUS).

Last Orders are invited to attend *HealthyU* events throughout the year including welcome week health registration fair and *HealthyU* road shows. Students concerned about their drinking can refer themselves to Last Orders.

4.2.2 Nottingham Trent University

Mental Health Support Team
The service uses a non-therapeutic approach and aims to support students whose illness is interfering with their studies. The service is designed to remove barriers to studying, negotiating reasonable adjustments and includes one to one mentoring. Students need to claim disability support to access the service. This is needs tested as students have to have a mental health disability and diagnosis but it is acknowledged that not everyone will have a diagnosis.

As part of the university's responsibility to widen participation by the local community, the team has established a programme called Well aHead to encourage people with mental health problems to consider higher education.

Risk Management
Academic and non-academic staff can access training to identify people who may be a risk to themselves or others. A 24 hour telephone number is available for anyone to call if they are worried about themselves or others. There is a Student Death protocol and the service works with parents if necessary.

Counselling services
The counselling service at Nottingham Trent University has a short-term student focus offering up to 6 sessions per student. Students can self-refer or be signposted to the service from the GP or academic staff. There is an on-line option available for those who are not able to attend for face-to-face sessions. This is a therapeutic service and if the student is deemed to have significant issues they may be referred to the GP.
The service is advertised through the student prospectus, at open days, during inductions, on the university website and during Welcome Week. Demand on the services is not consistent year around and there are usually significant waiting lists by mid-term. The service currently has 4 whole time equivalent counsellors with some student counsellors. The service runs over 3 campus locations (Clifton, City and Brackenhurst).

There is a self-help tool on the counselling website.

Chaplaincy
The service is funded through the churches and voluntary sector. It is a multi-faith and non-faith service and includes bereavement counselling, Islamic prayer rooms, well-being space, Lesbian, Gay, Bisexual and Transgender café, yoga classes, drop in sessions, international student activities and an equality and justice theme. An aim of the service is to aid the early identification of problems.

The service is currently being developed and is only available at the Clifton campus, though with time it may expand to the others. A new international chaplain is starting in August.

Disability Support
The university has a disability support unit for students with a range of disabilities including long term conditions, visual and hearing impairments, ME and chronic fatigue. Support is student-led. Some elect to declare disabilities on their application form and if so, they are offered an assessment of need at when starting their course, or whenever the student seeks support. The disability support unit works closely with the counselling service, GP practice and mental health advisors. The service is based at City and Clifton campus sites.

Health Promotion
The university has a substantive health promotion advisor and a programme of health promotion activity throughout the year. This includes health promotion activity during Welcome Week (formerly called Fresher's Week) and during term time in the halls of residence and main campus locations.

The Healthy Universities Health Promotion Strategy
The Health Promotion Advisor at Nottingham Trent University has been leading on a 'Healthy Universities' programme of work.
The work is driven by the Health Promotion Strategy which covers key health themes including Healthy Eating, Physical Activity, Smoking, Alcohol, Drugs and Legal Highs,

Health Protection and Sexual Health and Safety.

Road shows
Nottingham Trent Universities runs road shows that go into halls for first year students. They start in the second week of term and run every 1-2 weeks across the year. They include sexual health services (see below), Chillout provide harm minimisation advice and Last Orders provide alcohol advice.

Sexual health services
The Sunrise and Radford practices are level 1 sexual health services for asymptomatic individuals. The Health Shop participates in the halls road shows, providing sexual health screening for Chlamydia, gonorrhoea, syphilis, HIV and offer the c-card scheme for access to contraception). Healthy Gay Nottingham participates in the road shows also.

Sexual Assault
The University website Health and Wellbeing page contains some contact information and forms to contact support services. Searching on 'rape crisis' returned a useful document but there did not appear to be a link to it on the student support pages. (http://www.ntu.ac.uk/student_services/document_uploads/107710.pdf).
Most advice is on 'Self Help' pages of student support – links to this page from the other pages in the Health and Wellbeing section would be helpful.

4.4 Other Services provided for the wellbeing of the student population
Nottingham City Council provides support for students coming to live in the city via their own website; Nottingham Students . Students can find advice on licenced landlords, recycling, bin collections and staying safe. The Nottingham Housing Plan acknowledges the importance of the student population through planning for purpose built student accommodation and regulating the private rented sector. The Labour Manifesto has pledged to reduce burglary in student areas, and reduce risks associated with rogue landlords through a programme of landlord accreditation (UNIPOL for student housing).

4.5 The wider benefits to Nottingham from Higher Education
The University of Nottingham Impact campaign aims to raise £150 million pounds to develop projects that will have a lasting impact on the local community, including health and wellbeing and sustainability. More details can be found here http://www.nottingham.ac.uk/impactcampaign/impactcampaign.aspx.
In addition, the University of Nottingham sponsors the Samworth Academy in Bilborough, and both universities have a programme of widening community participation work to ensure students from a wide range of backgrounds and with disabilities are able to study e.g. the *Well aHead* initiative at Nottingham Trent University for students with a mental health difficulty.
Both universities have a programme of public engagement events such as open days e.g. May Fest and offer volunteering opportunities in and around the local community. In addition there is open community access to a wide range of galleries, performances and educational activities alongside business development opportunities with the two business schools.

5) Evidence of what works

The main health needs identified in this chapter for students are mental health, alcohol, smoking and sexual health; topics which are covered in detail in the respective JSNA chapters. The information given below relates specifically to students.

General Wellbeing

Healthy Universities

The UK National Healthy Universities Network (Healthy Universities) was established in 2006 and aims to offer a facilitative environment for the development of a whole university approach to health and wellbeing. There is also a national network to which members of the Nottingham Trent University staff belong.
This website aims to encourage a whole university approach to health and well-being and facilitates national networking. It is managed by the University of Central Lancashire and Manchester Metropolitan university.

There are various sections of the site which may be of interest:

- National Healthy Universities Toolkit - This toolkit comprises a collection of resources created by the Developing Leadership and Governance for Healthy Universities Project and is designed to support Higher Education Institutions (HEIs) that wish to adopt and/or embed a whole system Healthy University approach
- The toolkit includes institutional Case Studies which offer 'real life' examples of Healthy University related initiatives which have been implemented in institutions across the country. Including case studies from Nottingham Trent University.
- Newsletters - They aim to produce newsletters twice a year the last one was in July 2015. This includes a piece from Nottingham Trent University.

Alcohol

There is a body of evidence around effectiveness in alcohol interventions including

NICE public health guidance 24 (2010)

Alcohol-use disorders: preventing the development of hazardous and harmful drinking. This guidance covers the prevention and early identification of alcohol-use disorders among adults and adolescents. Its recommendations cover:

- licensing practices
- supporting children and young people aged 10-15
- appropriate screening and treatment for 16-17 year olds
- appropriate screening and treatment for adults

NICE clinical guideline 115 (2011)
Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence. This guidance covers principles of care, identification and assessment and interventions for alcohol misuse.

NICE Quality Standard for Alcohol (2011)
The alcohol dependence and harmful alcohol use quality standard defines clinical best practice within this area. It covers the care of children (aged 10-15 years), young people (aged 16-17 years) and adults (aged 18 years and over) drinking in a harmful way and those with alcohol dependence in all NHS-funded settings. It also includes opportunistic

screening and brief interventions for hazardous and harmful drinkers.

Other key guidance documents include:
Models of Care for Alcohol Misusers (DH 2006)
This provides best practice guidance for health organisations in delivering an integrated local treatment system and sets out a tiered approach for alcohol interventions.

Signs for improvement: Commissioning interventions to reduce alcohol-related harm (DH 2009)

This publication describes how organisations should be commissioning interventions to reduce alcohol-related harm. It includes some evidence base for the 7 high impact changes
The Purple Flag accreditation scheme sets out quality standards for managing the night time economy based on good practice.

Smoking

The All Party Parliamentary Group on Smoking and Health (2010)[55] reported on the effectiveness and cost-effectiveness of tobacco control and found that there is a very strong evidence base for tobacco control interventions and that comprehensive tobacco control provides economic value and a positive return on investment. For example, there is strong evidence which demonstrates that Stop Smoking Services are highly effective both clinically and in terms of cost. Department of Health (2011) guidance recommends that all smokers should be routinely offered advice to quit and a referral to the Stop Smoking Service
There is a wealth of evidence supporting tobacco control interventions. The National Institute for Health and Care Excellence (NICE) guidance predominantly focuses on smoking cessation interventions. Other government guidance and research addresses both smoking cessation and wider tobacco control. Further detail on the NICE and other recommendations can be found at: https://smokefreenotts.co.uk/local-resources-and-documents/

Elements of tobacco control include:-

Stopping the promotion of tobacco

Making tobacco less affordable

Effectively regulate tobacco products

Effectively communicate for tobacco control

Help tobacco users to quit

Nottingham's tobacco control work has been benchmarked against the Ten High Impact Changes to achieve tobacco control (Department of Health, 2008) to plan the development and delivery of best practice tobacco control interventions. These recommendations and identified gaps from the benchmarking exercise have been translated into 6 priority actions within the Tobacco Control Strategy and Action Plans.

A Smokefree Future: A comprehensive tobacco control strategy for England (Department of Health, 2010) details the rationale and evidence-based policies for future tobacco control work under three objectives:

- To stop the inflow of young people recruited as smokers. To motivate and assist every smoker to quit.
- To protect families and communities from tobacco-related harm.

Mental health

Student mental wellbeing in higher education: good practice guide

Universities UK; February, 2015

This guidance for the teaching and support of students experiencing mental health difficulties was commissioned by Universities UK and produced by the Mental Wellbeing in Higher Education Working Group. It draws on evidence and practice from within the higher education sector and reports from government and the health and voluntary sectors. It is aimed at senior leaders and managers, to support institutions in their promotion of mental wellbeing and in the support they provide for students experiencing mental health difficulties.

Support for higher education students with specific learning difficulties: Report to HEFCE by York Consulting and University of Leeds; 2015

Rodger, John; Wilson, Philip; Roberts, Hannah; Roulstone, Alan; Campbell, Thomas

This report, written by York Consulting and University of Leeds, focuses on the support for higher education students with Specific Learning Difficulties (SpLD). It sits alongside the report on the provision for students with mental health problems and intensive support needs. These two reports have been commissioned with a view to helping understand the challenges to institutions in supporting these students and how HEFCE and the Government could best shape support. The guidance (February 2015) was drafted for Universities UK by the Mental Wellbeing in Higher Education Working Group and is written for senior leaders and managers in universities and aims to support institutions in their promotion.

Understanding provision for students with mental health problems and intensive support needs: Report to HEFCE by the Institute for Employment Studies (IES) and Researching Equity, Access and Partnership (REAP)

Matthew Williams, Pam Coare, Rosa Marvell, Emma Pollard (IES) Dr Ann-Marie Houghton, Jill Anderson (REAP)

Institute for Employment Studies, July 2015

This report was written by the Institution of Employment Studies and focuses on understanding provision for students with mental health problems and intensive support needs. It sits alongside the report on support for students with specific learning difficulties. The reports were commissioned with a view to helping to understand the challenges to institutions in supporting these students and how HEFCE and the Government could best shape support.

Understanding adjustments: supporting staff and students who are experiencing mental health difficulties

Equality Challenge Unit, 2014

This piece of research looks into disclosure and support mechanisms for staff and students experiencing mental health difficulties. This research looks at reasons why staff and students disclose or do not disclose a mental health difficulty, and the support and adjustments that universities provide. Overall, 2,063 HE staff and 1,442 students who had experienced mental health difficulties responded to the survey and their voices have helped to shape the report and resulting recommendations.

Mental health of students in higher education

Royal College of Psychiatrists, 2011
Most higher education institutions have sophisticated pastoral and counselling services in place, however, in many universities the provision of services has not kept pace with expanding student numbers – leaving existing services overstretched. They are supported by local NHS services, although NHS mental health provision for students is variable. The report discusses how the efforts of NHS services and those provided by higher education institutions can be better coordinated. The report makes a series of 14 key recommendations and provides practical help to those who wish to improve the care and treatment of mentally troubled students. It will assist higher education institutions and others who are seeking to establish policies and procedures for the prevention of mental disorders.

The following NICE guidance are relevant to identifying and treating mental illness and improving mental well-being:
Eating Disorders (CG9) (2004) recommends the core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and other related eating disorders
Depression in adults (CG90) (2009) makes recommendations on the identification, treatment and management of depression in adults aged 18 years and older, in primary and secondary care.
Depression and anxiety – computerised cognitive behavioural therapy (CCBT) (TA97) (2006) makes recommendations about the use of computerised cognitive behavioural therapy (CCBT) to treat depression and anxiety. The recommendations in this technology appraisal relating to the treatment of depression have been replaced by recommendations in the clinical guidelines on depression but the recommendations relating to the treatment of panic and phobia and obsessive compulsive disorder remain valid.

The Suicide Prevention Strategy for England (2012) published by the Department of Health. The strategy is based on 6 goals: reduce the risk of suicide in key high-risk groups, tailor approaches to improve mental health in specific groups, reduce access to the means of suicide, provide better information and support to those bereaved or affected by suicide, support the media in delivering sensitive approaches to suicide and suicidal behaviour and support research, data collection and monitoring.

Sexual health
In March 2013 the Department of Health Published 'A Framework for Sexual Health Improvement in England'. The Framework looks at the life course from young people into old age, as well as its aim to look at the wider determinants of poor sexual health. It sets out the following ambitions to improve the sexual health and wellbeing of the young people:

- Young people aged 16-24 ambition: improve sexual health outcomes for young adults
- People aged 25-49 ambition: all adults have access to high quality services and information

6) What is on the horizon?

Projected service use and outcomes in 3-5 years and 5-10 years

1) Projected service use and outcomes in 3-5 years and 5-10 years

The total population of the City is very likely to continue to rise. The City Council estimates indicate a rise of 9,000 (3.1%) from 2008 to 2013 and a further 8,100 (2.7%) from 2013 to 2018. These would be considerably slower rates of increase than occurred between 2003 and 2008 (17,300 or 6.3%). It may be that these should be regarded as minima, although the current state of the housing market must throw all projections based upon recent trends into some doubt. It should also be borne in mind the period 2003 to 2008 included a growth of around 5,000 students, which may not be repeated, and the influx of people from the EU Accession countries. At the University of Nottingham the Sutton Bonington campus is expanding rapidly with 1,800 students currently and expecting to rise to over 2,000 in the next 5 years.

The impact of the new student tuition fees is not yet known. The proportion of home and international students may change, along with the proportion of home students who stay at home with their parents/families rather than moving to a new city.

7) Local Views

Extensive discussions were undertaken with local service providers at both universities and for all three main student GP practices as part of this health needs assessment work. However student views were not specifically sought. This may be a focus of future refreshes of this JSNA work.

Nottingham City CCG consulted with students in the development of the CCGs priorities. Students attending health registration were asked to complete a short survey about their attitudes to health between 23-27th September 2013 (Fresher's Week).

Most students felt that they lived healthy lifestyles but did not generally know where to go for information on health services and were most likely to look online for information.

The survey found cultural differences in accessing health services. Many students did not know how to share experiences, raise concerns or make a complaint about health services and were not clear about which services to use for different health problems.

Newcastle University undertook surveys and focus groups with students in 2012 and the findings of this needs assessment have been reflected in Nottingham. In addition, the University of Nottingham has carried out an extensive piece of research on the mental health of Chinese and Malaysian students and the findings of this work are summarised above.

Information from the national patient satisfaction survey can be accessed for the all GP practices at:

http://www.nhs.uk/ServiceDirectories/Pages/GP.aspx?Pid=BE2602FC-1209-45DD-92DB-EFC479D9E7CB&TopicId=7

What does this tell us?

8) Unmet needs and service gaps

A significant proportion of Nottingham City's population are students in higher education. Whilst there is a common view that students are a relatively healthy population, there are characteristics of being a student in particular that may have a hidden impact on long term

health outcomes if not managed appropriately. In addition it is important to ensure as far as possible that a student who has started a course at university, but who is at risk of dropping out, is supported to continue, given the positive association of higher educational achievement and better long term health outcomes.

The characteristics of the student population that may impact on their health outcomes are as follows:

Continuity of care

Students often live away from the family home during term time but move back home during vacations. These transitory living arrangements make accessing mainstream services more complicated. There are challenges of ensuring continuity of care between 'home' and university providers, particularly in terms of the management of chronic conditions such as mental illness, and it would be helpful if there were flexibility around waiting times and appointments that acknowledge the university timetable. University support services from both Nottingham Trent University and the University of Nottingham report that often students are offered appointments during vacation times when they would ordinarily return home, or that appointments are not flexible enough during for example exam periods. In addition, there are times when the duration of an intervention exceeds a semester, resulting in either curtailed treatment or having to start the referral, assessment and treatment process again in their 'home' location.

International students

There is a high proportion of students from overseas who may not fully understand how to access services in the UK or who may have cultural reasons for not wanting to, nor feel able to access services. There is some evidence that international students are under-represented in counselling services data for example and the 2011 mental health needs assessment undertaken at the University of Nottingham[56] indicated that there are barriers to accessing mental health support for international students and in particular those from China. For these students the tutor and academic staff support system is often seen as a more acceptable source of support but may not be the most appropriate.

Immunisation and vaccination

The close living arrangements of students means that infection control measures need to be given careful consideration. This includes access to vaccinations and screening as well as having outbreak management plans in place. There does not appear to be a system for ensuring MMR catch up for students studying at campuses outside the City. MenACWY vaccination is currently done on a good-will arrangement across the City practices. International students in particular may not have been routinely vaccinated in their country of origin. Students arriving from countries with higher incidence of disease such as TB need to be identified and immunised.

Registration with GP practices

The new academic year presents a significant amount of work for the main student GP practices. Up to one third of the practice list will leave at the end of the academic year and there will be up to one-third new patients that register at the beginning of the academic year. This mass-registration process again adds a layer of complexity to the assessment of

health needs. Firstly, not all students will re-register with a GP in Nottingham when they leave home to study. There is some evidence to suggest that this may be particularly true of students with long term or enduring conditions. In addition, for those that do register in Nottingham, this busy period means that the needs of more vulnerable students may be overlooked. Although the majority of students are registered with one of three city practices serving the student population, a significant number will be registered with other practices in which they will not form a clearly identified sub-group, for instance students living at home in Nottingham that have stayed with their family practice and students at the satellite campuses in the county. It is important that these practices ensure the students under their care have good access to services open to students and that their immunisation histories are up to date.

Sexual Assault

National research commissioned by the National Union of Students provided some evidence that sexual harassment and assault were an issue, particularly for female students. There is very little information on the extent of the problem locally or on the services available to tackle the issue.

Smoking

Students appear to have a low uptake of smoking cessation services based on a health equity audit in 2015 and there has been a withdrawal of smoking cessation outreach support to the university campus health promotion events.

Alcohol and drugs

The prevalence of high alcohol consumption in student populations and the impact on student activities such as Welcome Week on the Nottingham night-time economy are significant. Research evidence suggests students are more likely than non-students to use ketamine. Data from Mosaic indicates that students are more likely to take cannabis and cocaine.

9) Knowledge gaps

Whilst undertaking this health needs assessment it was often the case that data on students was not specifically available. The current methods of using registration at the main GP practices and Mosaic segmentation to identify the student population presents limitations in terms of sensitivity of the data.

What should we do next?

10) Recommendations

1) Establish commissioning links between the University Support Services (at the University of Nottingham and Nottingham Trent University), Nottingham City CCG and Nottingham City Council in order to secure a wider perspective on service planning and delivery.

Formalising a closer working relationship between the universities, local commissioners and providers of healthcare and Nottingham City Council in these areas is likely to be beneficial.

This would ensure appropriate input when developing specific health strategies such as alcohol, smoking and mental health, would assist in the planning of services at key times that impact on Nottingham as a whole, such as Welcome week and would ensure appropriate input into community planning areas such as housing.

Mainstream care pathways do not currently acknowledge students as a specific group with needs in terms of timing of appointments, continuity of care across the academic year and cultural differences with the international students. This is most pressing in the area of mental health services including treatment for eating disorders but also for sexual health, smoking cessation and alcohol harm reduction services.

2) CCGs to consider how differences in service availability experienced by students registered with practices in Nottinghamshire County and Nottingham City could be taken forward.

Whilst each university considers its registered students as a single population, in practice the student populations fall into different local authorities and CCG footprints. Whilst the majority of students study and are registered with GPs in Nottingham City, a significant proportion study at two campuses in Nottinghamshire County i.e. Sutton Bonington and Brackenhurst and may therefore register with GPs in Rushcliffe CCG and Newark and Sherwood CCG. The JSNA process could support commissioning by considering the needs of students as a specific population group in all relevant chapters.

3) Discussions with stakeholders at the two universities highlighted the need for improved communication between in-house university mental health advisors and counselling services and mainstream mental health services regarding service venues, clinic times, waiting list times and interventions offered. Universities would benefit from more effective communication from external services about changes to service provision and access. With on-going re-commissioning and restructuring of services, this is a particular difficulty.

The mental health services at the two universities do not feel that they have enough information to give to students who need to be referred to mainstream mental health services about what is available, when and where, particularly since mainstream services have been re-commissioned.

4) When commissioning services for student populations, the CCG should ensure equitable access across the two universities going forward. The benefits of extending the TB screening programme for new entrants to Nottingham Trent University should be considered.

5) A systematic procedure for ensuring all students have a complete immunisation history needs to be developed, particularly in relation to the MenACWY vaccine introduced in August 2015.

6) The recommendations from the Mental Health Needs Assessment of Chinese and Malaysian students should continue to be incorporated in how both Universities engage with International students. This was a significant piece of work and highlighted important issues related to access to mental health services for students.

7) All partners, including the Nottingham City CCG, Nottingham University Hospital, the main student GP practices, EMAS and University Support Services should consider a mechanism for ensuring that better health intelligence about the student population is available for future needs assessments.

Future health needs assessments would be enhanced with more specific data regarding the

student population. This could be made easier if there was a way of identifying individuals as students in routine data, by for example adding a 'student tag' (Further Education and Higher Education) in primary, secondary and tertiary care or by planning new data collection to capture student-specific needs for example through cross sectional surveys. Consideration could be given to the development of a demographic dataset provided by the universities containing age, gender, postcode, country or UK postcode of origin, ethnicity as a basis for future needs assessments.

8) The University of Nottingham and Nottingham Trent University should continue to provide culturally-appropriate information for home and international students about how to access health services in England and what health services are available and this should be supported by the local health services. In addition, students should be encouraged to register with a local (Nottingham) GP practice in line with NHSE recommendations.

9) Both Universities should continue to raise awareness of alcohol and drugs harms and ensure students are able to easily access appropriate services. In addition, a review of the extent of sexual harassment including prevalence, level of reporting and services available is recommended with development of integrated and comprehensive interventions targeting young people in the university setting.

10) There is a need to ensure other relevant JSNA chapters consider students as they form such a significant section of our population to ensure that commissioning decisions consider the term-time / continuity problems encountered by students.

Key contacts

Jean Robinson, Strategic Intelligence, Nottingham City Council

Rachel Sokal, Consultant Public Health, Nottingham City Council

References

[1] Mental Health Needs Assessment of Chinese and Malaysian Students undertaken at the University of Nottingham, 2011

[2] Hidden Marks A study of women students' experiences of harassment, stalking, violence and sexual assault, National Union of Students, Originally published by NUS 2010, Second edition published 2011

[3] Health Equity Audit of New Leaf Smoking Cessation Service , Nottingham City Council, 2015

[4] Students used to take drugs to get high. Now they take them to get higher grades (http://www.theguardian.com/society/2015/feb/15/students-smart-drugs-higher-grades-adderall-modafinil)

[5] Disabled Students Allowances (DSAs) (https://www.gov.uk/disabled-students-allowances-dsas/overview), 2015

[6] Gill O'Neill, Health Needs Assessment of University Students studying in Newcastle, 2012

[7] Royal College of Psychiatrists. Mental Health of Students in Higher Education, 2011:1-96

[8] JRF. Drinking in the UK: an exploration of trends. In: Foundation JR, editor, 2009.

[9] Webb E, Ashton CH, Kelly P, Kamali F. Alcohol and drug use in UK university students. *Lancet* 1996;348(9032):922-5

[10] Royal College of Psychiatrists. Mental Health of Students in Higher Education, 2011:1-96

[11] Leeds Student Health Needs Assessment, 2004, Leeds North West Primary Care Trust (http://ahpwebserver1.opt.uea.ac.uk/publications/Leeds_HNA.pdf)

[12] Bewick BM, Mulhern B, Barkham M, Trusler K, Hill AJ, Stiles WB. Changes in undergraduate student alcohol consumption as they progress through university. BMC Public Health 2008;8:163.
[13] Eisenberg D, Gollust SE, Golberstein E, Hefner JL. Prevalence and correlates of depression, anxiety, and suicidality among university students. Am J Orthopsychiatry 2007;77(4):534-42.
[14] Macaskill, Ann, The mental health of university students in the United Kingdom. British Journal of Guidance & Counselling, Aug 2013, vol. 41, no. 4, p. 426-441, 0306-9885
[15] Dodd LJ, Al-Nakeeb Y, Nevill A, Forshaw MJ. Lifestyle risk factors of students: a cluster analytical approach. *Prev Med*;51(1):73-7.
[16] McManus S MH, Brugha T, Bebbington P, Jenkins R. Adult psychiatric morbidity in England, 2007 Results of a household survey. In: Sciences H, editor. University of Leicester: The Information Centre for health and social care, 2007.
[17] McManus S MH, Brugha T, Bebbington P, Jenkins R. Adult psychiatric morbidity in England, 2007 Results of a household survey. In: Sciences H, editor. University of Leicester: The Information Centre for health and social care, 2007.
[18] Hoek HW. The incidence and prevalence of anorexia nervosa and bulimia nervosa in primary care. Psychol Med 1991;21(2):455-60.
[19] JRF. Drinking in the UK: an exploration of trends. In: Foundation JR, editor, 2009.
[20] Webb E, Ashton CH, Kelly P, Kamali F. Alcohol and drug use in UK university students. *Lancet* 1996;348(9032):922-5.
[21] Gill JS. Reported levels of alcohol consumption and binge drinking within the UK undergraduate student population over the last 25 years. Alcohol Alcohol 2002;37(2):109-20.
[22] Morton F TB. Prevalence of, and factors influencing, binge drinking in young adult university under-graduate students. *Journal of Human Nutrition and Dietetics* 2011;24:277-31.
[23] Dodd LJ, Al-Nakeeb Y, Nevill A, Forshaw MJ. Lifestyle risk factors of students: a cluster analytical approach. *Prev Med*;51(1):73-7.

[24] Boland M, Fitzpatrick P, Scallan E, Daly L, Herity B, Horgan J, et al. Trends in medical student use of tobacco, alcohol and drugs in an Irish university, 1973-2002. *Drug Alcohol Depend* 2006;85(2):123-8.
[25] Watson H, Whyte R, Schartau E, Jamieson E. Survey of student nurses and midwives: smoking and alcohol use. Br J Nurs 2006;15(22):1212-6.
[26] Crime Survey for England and Wales (CSEW) 2010-2011
[27] Bennett, Trevor H., Holloway, Katy R, Drug use among college and university students: findings from a national survey. Journal of Substance Use, 01 February 2015, vol./is. 20/1(50-55), 14659891
[28] Tyson P, Wilson K, Crone D, Brailsford R, Laws K. Physical activity and mental health in a student population. J Ment Health;19(6):492-9.
[29] Dodd LJ, Al-Nakeeb Y, Nevill A, Forshaw MJ. Lifestyle risk factors of students: a cluster analytical approach. *Prev Med*;51(1):73-7.
[30] Serlachius A, Hamer M, Wardle J. Stress and weight change in university students in the United Kingdom. *Physiol Behav* 2007;92(4):548-53.
[31] El Ansari W, Clausen SV, Mabhala A, Stock C. How do I look? Body image perceptions among university students from England and Denmark. Int J Environ Res Public Health;7(2):583-95.
[32] Neal KR, Nguyen-Van-Tam J, Monk P, O'Brien SJ, Stuart J, Ramsay M. Invasive meningococcal disease among university undergraduates: association with universities providing relatively large amounts of catered hall accommodation. Epidemiol Infect 1999;122(3):351-7.
[33] Neal KR, Nguyen-Van-Tam JS, Jeffrey N, Slack RC, Madeley RJ, Ait-Tahar K, et al. Changing carriage rate of Neisseria meningitidis among university students during the first week of term: cross sectional study. *BMJ* 2000;320(7238):846-9.

[34] NICE. Clinical diagnosis and management of tuberculosis, and measures for its prevention and control *Clinical Guideline 117*, 2011:1-64.
[35] Nottingham LASER Report, 2015, Public Health England
[36] Burns S., Sexual health, alcohol and the university environment: Is there a need for sexual health promotion intervention? Sexual Health, 2015, vol./is. 12/3(269-271), 1448-5028;1449-8987
[37] Higher Education Statistics Agency, 2013/14 *(https://www.hesa.ac.uk/) © Higher Education Statistics Agency Limited 2015*
[38] Higher Education Statistics Agency, 2013/14 *(https://www.hesa.ac.uk/) © Higher Education Statistics Agency Limited 2015*
[39] Students used to take drugs to get high. Now they take them to get higher grades (http://www.theguardian.com/society/2015/feb/15/students-smart-drugs-higher-grades-adderall-modafinil)
[40] Warwick-Edinburgh Mental Wellbeing Scale WEMWBS, Warwick Medical School
[41] Royal College of Psychiatrists. Mental Health of Students in Higher Education, 2011:1-96
[42] Leeds Student Health Needs Assessment, 2004, Leeds North West Primary Care Trust (http://ahpwebserver1.opt.uea.ac.uk/publications/Leeds_HNA.pdf)
[43] Mental Health Needs Assessment of Chinese and Malaysian Students undertaken at the University of Nottingham, 2011
[44] Students used to take drugs to get high. Now they take them to get higher grades (http://www.theguardian.com/society/2015/feb/15/students-smart-drugs-higher-grades-adderall-modafinil)
[45] Health Protection Report Vol. 9 No. 38 – 23 October 2015, Public Health England https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/470602/hpr3815_imd.pdf
[46] Nottingham Local Authority sexual health epidemiology report (LASER): 2014
[47] HIV & STI web portal, Public Health England 2015.
[48] NUS (2010). Hidden Marks. http://resource.nusonline.co.uk/media/resource/NUS_Hidden_Marks_web_1.pdf
[49] NUS (2013) That's what she said: Women students' experiences of "lad culture" in higher education
[50] NUS (2015) Lad Culture Audit Report
[51] Sexual health, alcohol and the university environment: Is there a need for sexual health promotion intervention? Sexual Health, 2015, vol./is. 12/3(269-271), 1448-5028;1449-8987 (2015), Burns S.
[52] Myint K.S., Sampson M.J., Price C., Swords F.M., Howe A., Datta V., Kellett J, Patients' perspective: Diabetes care in UK universities, Diabetic Medicine, March 2015, vol./is. 32/(123-124), 0742-3071
[53] Royal College of Psychiatrists. Mental Health of Students in Higher Education, 2011:1-96
[54] University Counselling Service Annual Report 2013-2014, University of Nottingham, 2015
[55] All Party Parliamentary Group on Smoking and Health (2010) ISBN : 978-1-872428-84-0
[56] Mental Health Needs Assessment of Chinese and Malaysian Students undertaken at the University of Nottingham, 2011