Brent Young Persons Cigarette and Shisha Audit 2012

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Contents

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Introduction

The Brent Young Persons Cigarette and Shisha Audit was conducted amongst secondary school students between October 2011 and March 2012.Nearly 3,000 Year 8, Year 10, Year 12 and Year 13 students from fifteen high schools in Brent were surveyed. Detailed information about tobacco prevalence, second hand smoke exposure in the home as well as students' knowledge and beliefs of tobacco was gathered, the results of which are summarised in this report. Detailed questions about shisha smoking were also asked and Brent is proud to be one the first organisations in the UK to present comprehensive information about shisha in young people. Furthermore, with the academic support from Imperial College School of Public Health, some of the findings have been published in an international, peer-reviewed tobacco journal. In order to complete the audit cycle and gain further information, a re-audit of our students is planned from October 2013.

Background

The scale of the problem

The use of tobacco is now a global epidemic contributing to five million annual deaths(1). Tobacco use accounted for 81,400 premature, preventable deaths in England in 2009(2) and is still the single greatest cause of preventable ill health and premature mortality both in the UK and in Brent. Treating smoking-related illnesses is estimated to have cost the NHS £2.7 billion in 2006-2007, with the overall economic burden costing an estimated £13.7 billion a year(3). Brent's estimated (adult) smoking population is **37,100** people. When the wider impacts of tobacco-related harm are taken into account, it has been estimated that the cost of smoking to society in Brent is **£57.9m** each year. In addition the local population spend **£65.6m** on tobacco-related products(3).

Efforts to reduce smoking prevalence focus on both supporting cessation and preventing uptake. Two thirds of new smokers are young people under the age of 18, and those who start smoking before the age of 16 are twice as likely to continue to smoke as those who begin later in life(4).They are also more likely to be heavier smokers and are therefore at greater risk of developing chronic and life threatening conditions related to smoking and exposure to second hand smoke(5). Young people are between three and five times more likely to smoke if they come from a household where either a parent or older sibling smokes(6).

Why this audit was conducted

Development of the Brent Tobacco Control Strategy 2010 –2013 highlighted that robust evidence relating to tobacco use among youth in Brent was limited. Baseline evidence used to inform the strategy were the Ofsted TellUs surveys published in 2007, 2008 and 2009, and the Schools Health Education Unit survey conducted in 2006, however there were no future plans for Brent to conduct these surveys beyond 2009. These sources whilst useful in modelling prevalence rates, failed to provide any in-depth information on young peoples' attitudes toward tobacco use, nor levels of risk of tobacco uptake among Brent's youth.

Alongside this, a flourishing shisha industry was reported to be emerging in the Borough and anecdotal evidence suggested that shisha was rapidly gaining popularity among young people in Brent. Informal research indicated that shisha bars in Brent regularly used social media to keep in contact with their clients. Similarly these forums were used to advertise events such as 'DJ and Arabian parties' and 'half price discounts for students'. It was clear that shisha marketing was increasingly targeted at young people who were informally reporting its popularity.

Audits are widely-used, fundamental tools which, in healthcare, function to assess and maintain the quality of practice within an organisation (Figure 1).The aim is to find out how the present provision compares with that of the desired standard. In the context of preventative medicine and public health, it was deemed appropriate to utilise audit in an attempt to gather robust baseline data that could help inform Brent's strategic plans around tackling youth tobacco use. These plans would be benchmarked against standards as recommended to the Brent Tobacco Control Alliance by Action on Smoking and Health (ASH) through a recent CLeaR | (professional peer review) assessment. Re-audit planned for October 2013 will allow for completion of the audit cycle and gain further information on the effectiveness of interventions.

Rationale for including shisha smoking

Although herbal varieties of shisha molasses are available, most contains tobacco and nicotine. A sample of the 6 most commonly sold flavours of shisha in Brent cafes indicated the presence of tobacco and nicotine. There is a growing body of evidence that suggests that smoking shisha is associated with many of the same serious, life-threatening conditions as cigarette smoking: lung cancer, respiratory illness such as chronic obstructive pulmonary disease (COPD) and cardiovascular disease(7). High levels of carbon monoxide (CO) have caused CO poisoning in some users(8). Second hand shisha smoke is also harmful, particularly for non-smokers(9).

After a search of the literature it was found that there was very little information on shisha smoking prevalence and attitudes in the UK. With the academic support and interest from Imperial College London it was decided that this audit would include additional questions on shisha tobacco knowledge and use.

Figure 1: The Audit Cycle

Methods

Study Design

To complement the audit cycle, we planned to conduct our first audit in October 2011 and our re-audit in October 2013. We aimed to survey Year 8, Year 10 and Year 12/13 students, in the expectation that the two year gap between these students would maximise chances of re-auditing the same cohort of students.

All 23 schools listed with the Local Education Authority (LEA) were approached to participate (Appendix 1).They were contacted in August 2011 by telephone, email and postal letter. These explained the rationale of the audit, invited them to participate and gave the option of a paper or online questionnaire. Schools that did not respond were sent weekly reminders for several weeks. Fifteen schools agreed to take part in this audit, six declined and two did not respond.

The audit was conducted between October 2011 and March 2012, over a six month period. The questionnaires were delivered either in an assembly or during a pre-assigned lesson (usually an Information and Communication Technology lesson).Where possible and appropriate, whole year groups were audited. Among participating schools a response rate of 89.8%was achieved. This equated to audit of31.9% of all Year 8, 10, 12 and 13 students in Brent across a range of ethnicities and localities, making the results representative of the Borough.

For the purposes of our peer-reviewed publication we only analysed data for fully complete answers to only some of the questions (2399 responses), but in this report will share results for the whole sample unless specifically stated.

Questionnaire Design

The questionnaire was developed from a bank of questions gathered from existing questionnaires such as the Global Youth Tobacco Survey (GYTS)(10), General Household Survey (GHS)(4) and the Young Persons Behaviour and Attitudes Survey(11).This was done for two reasons: firstly, using pre-existing validated questionnaires that are tried and tested increases the validity of the results; secondly, it enables comparison to results already in the literature.

To gain more information about shisha smoking, we mirrored nearly every cigarette question with an identical shisha question. This enabled a side-by-side comparison dataset for these two forms of tobacco smoking. The final questionnaire (Appendix 2) consisted of 34 main questions, divided into four main categories: 1) prevalence and initiation of smoking, smoking habits and tobacco exposure at home; 2) cessation; 3) beliefs, attitudes and knowledge; 4) socioeconomic status (SES) and personal information. Internet survey software (Survey Monkey) was also used to create online versions of the questionnaire.

Definitions

The presence of free school meals was used as an indicator for lower SES. 'Current smoker' was defined as somebody who smokes regularly (at least weekly) or occasionally (less than weekly) as outlined by the Statistics on Smoking: England 2011 Report(12). An 'ever smoker' was defined as somebody who has tried smoking, even if it was one or two puffs.

Shisha café mapping exercise

In 2010 Brent Council geographically mapped all shisha cafes and educational establishments in Brent. This process was repeated in 2012 for the purpose of this audit, and the information gathered was used to try to calculate whether proximity of shisha cafes to schools had an effect on the popularity of shisha smoking in that school.

Analysis

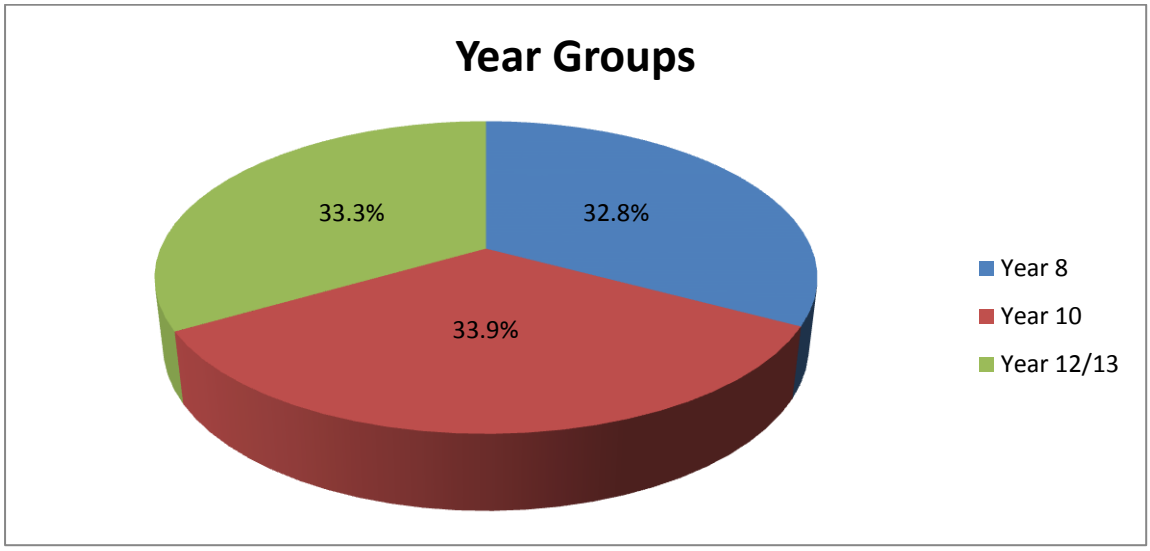
Responses to the online questionnaires were downloaded directly into an Excel spread sheet. Data from paper questionnaires was entered manually onto the same spread sheet. With help from Imperial College School of Public Health, data was analysed using two statistical software programs: Stata 11 and SPSS 17.0. Logistic regression was the main statistical analysis that was performed. This method identifies which factors from the questionnaire statistically predict smoking, such as gender, ethnicity, SES, age and tobacco use among family and friends.

For the purposes of this report we created graphical images to display our data where the number in brackets e.g. (n=2882) refers to the number of respondents for that particular question. Data referring to statistics not shown in the graphs below were taken from our peer-reviewed publication.

Results

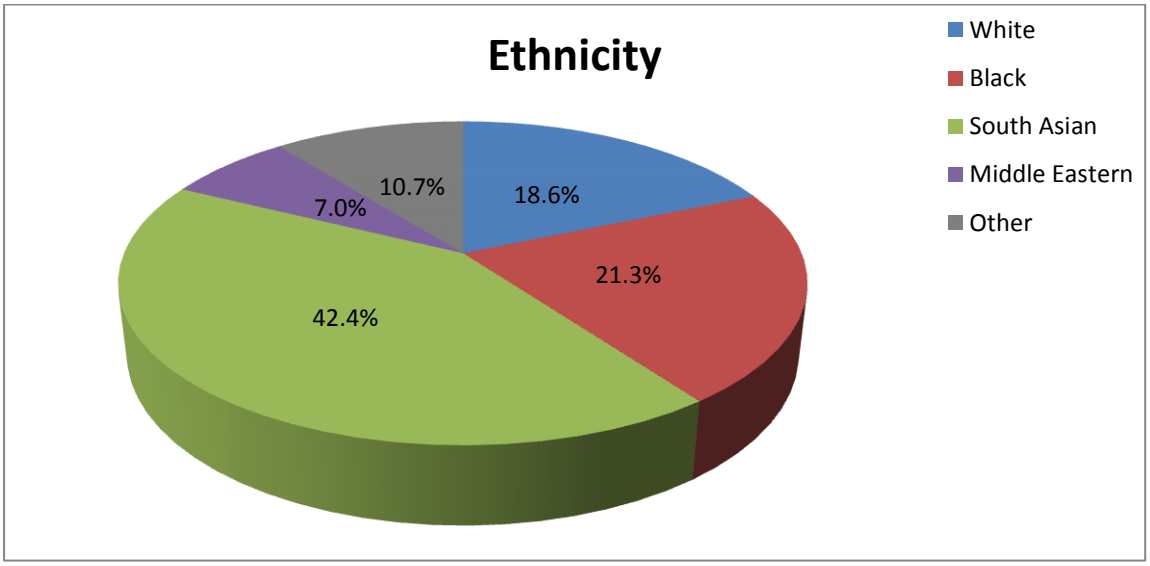
Demographics:

Graph 1: Year groups (n=2882)



- Approximately equal numbers of students from year 8, 10 and 12/13 were surveyed. In total, half of these were male and half were female.

Graph 2: Ethnicity (n= 2610)

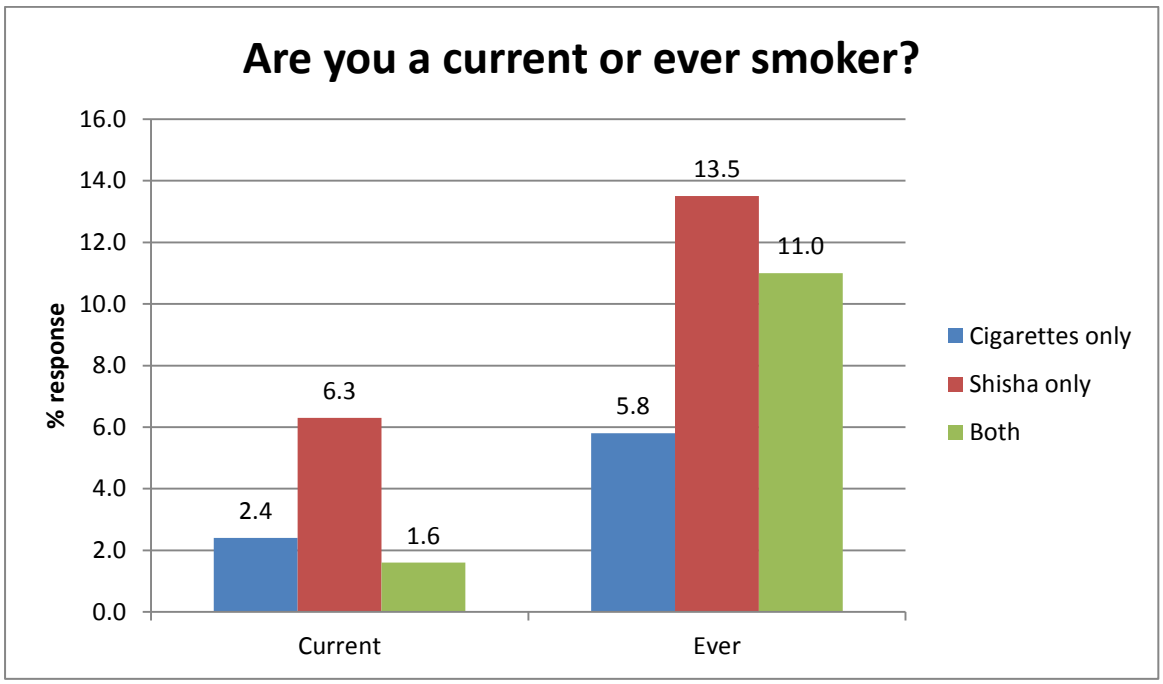


- Respondents were representative of a wide range of ethnicities reflective of the diverse population in Brent, and the most common ethnicity was South Asian (mainly of Indian, Pakistani and Bangladeshi origin)

Smoking prevalence:

In England, according to the annual 'Smoking, Drinking and Drug Use Among Young People in England 2010' survey, 5% of 11-15 year olds were regular smokers (that is they smoked at least one cigarette a week). The prevalence of smoking was noted to increase sharply with age and while very few 11 year olds smoked (<0.5%), 12% of 15 year olds were regular smokers. The following graphs relate to smoking prevalence in Brent.

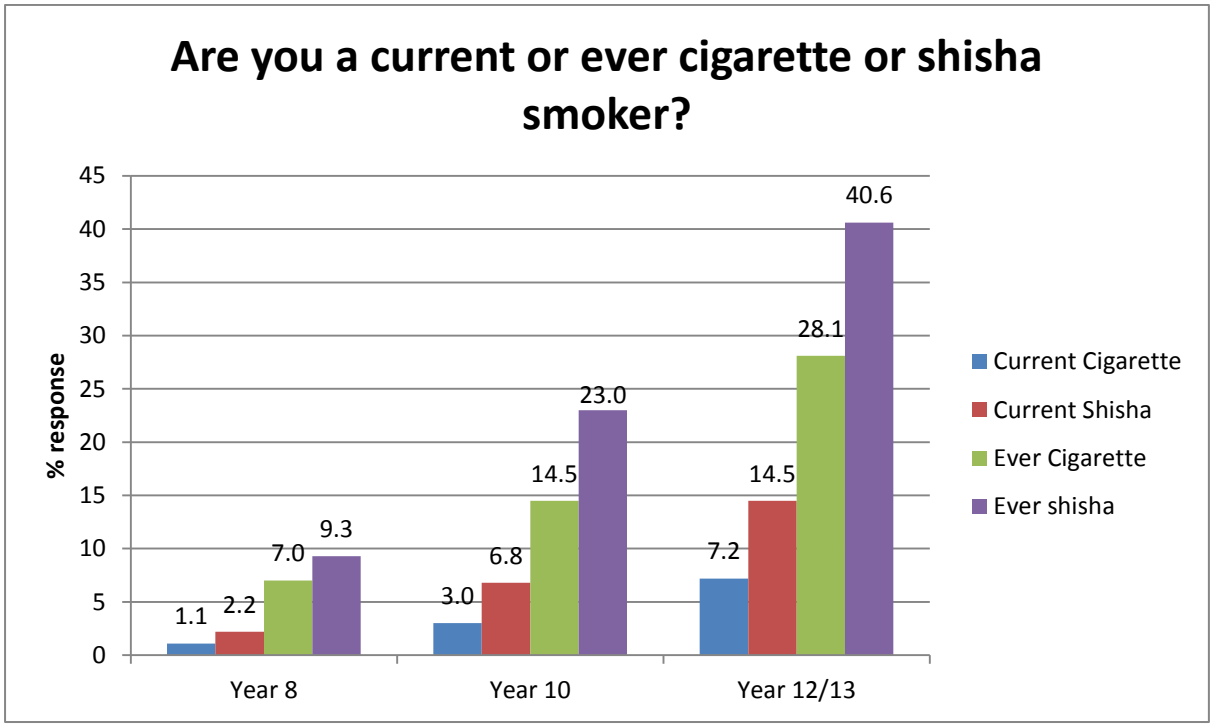
Graph 3: Overall response with dual smokers shown (n=2882)



Graph 3 shows both current and ever smoking status for both cigarettes and shisha for the entire Brent sample.

- 4.0% of all respondents in Brent's survey stated they were current cigarette smokers
- 7.9% of respondents stated they were current shisha smokers
- The figures for shisha smoking were roughly double the figures for cigarette smoking
- A quarter of all respondents had tried shisha and 16.8% had tried cigarettes. A sizeable proportion of these had tried both forms of tobacco

Graph 4: Overall response by year (n=2817)

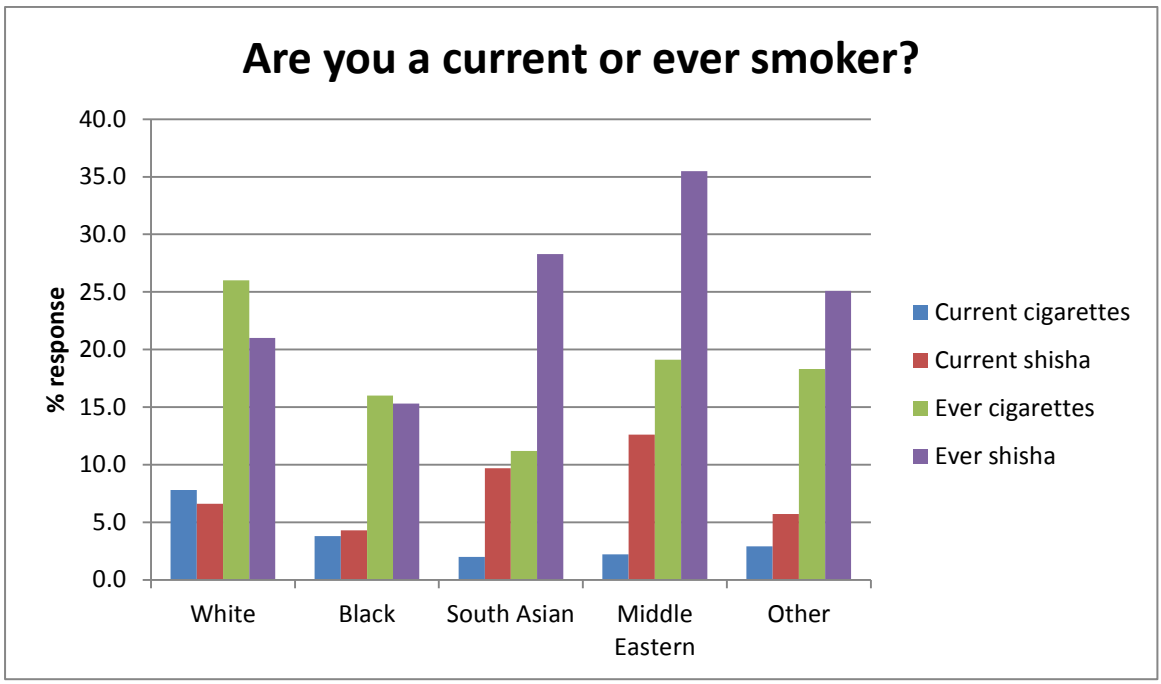


Graph 4 shows current smoking prevalence for cigarettes and shisha by year group:

- Cigarette smoking prevalence in Brent increased sharply with age. 1.1% of respondents from Year 8 were current smokers. This increased to 3% of Year 10 students and 7.3% of Year 12/13 students identifying themselves as current cigarette smokers. These results are similar to the national trends.
- Current shisha smoking prevalence also increased with age. 2.2% of Year 8 students, 6.8% of Year 10 and 14.5% of Year 12/13 students were current shisha smokers.
- 40.6% of Year 12/13 students had tried shisha compared with 28.1% having tried cigarettes.

In addition, slightly more girls than boys were both current or ever shisha or cigarette smokers but this was not a significant difference after statistically testing. The average age of smoking initiation was 12.8 years old for cigarettes and 13.5 years old for shisha. 3% of sixth form students stated they currently smoked both cigarettes and shisha.

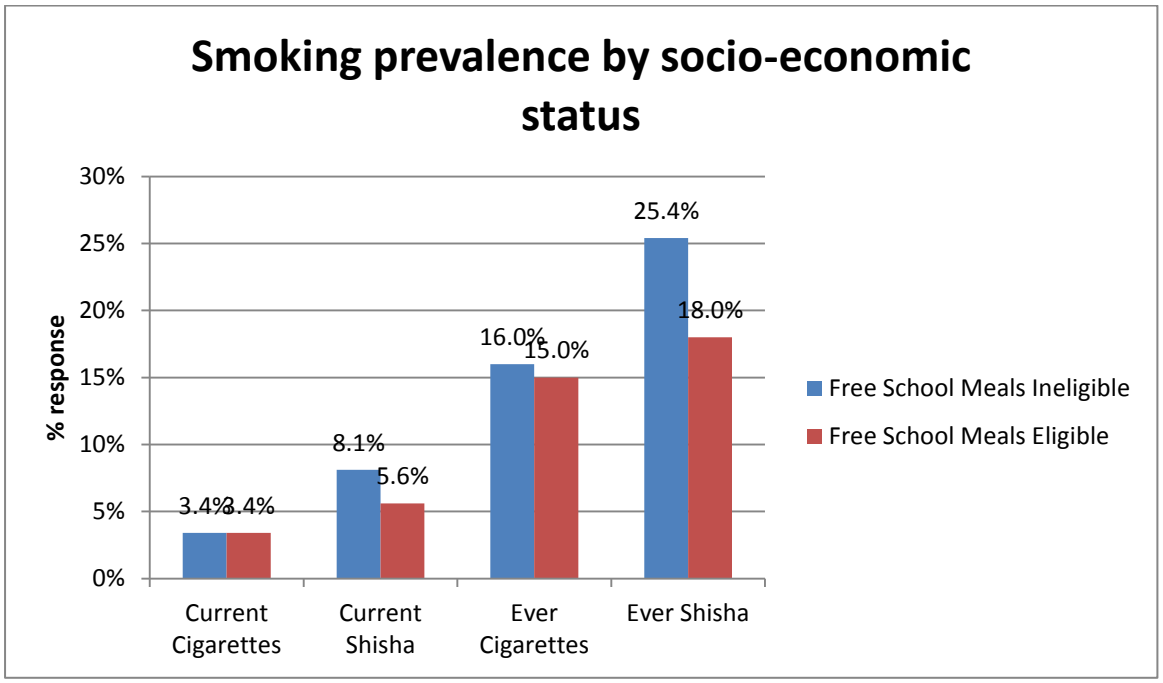
Graph 5: Prevalence by ethnicity- all (n=2610)



The following conclusions can be made about ethnicity and smoking prevalence:

- Compared to the White ethnicity, only South Asian, Middle Eastern and Other ethnicities were less likely to be current cigarette smokers. There was no difference in current cigarette prevalence between White and Black ethnicities.
- Students from a White ethnicity were significantly more likely to be ever cigarette smokers than all other ethnicities.
- Even though South Asian students reported a high prevalence of shisha smoking, only students from a Middle Eastern ethnicity were more likely to be current shisha smokers compared to the White ethnicity.
- However for ever shisha smoking, both students from a Middle Eastern and South Asian ethnicity were more likely to smoke than students from a White ethnicity.

Graph 6: Smoking prevalence by socio-economic status (n=2399)



- Despite wider literature reporting that smoking prevalence is higher among socially and economically disadvantaged groups, graph 6 suggests that students who were *ineligible* for free school meals had a slightly higher prevalence of current shisha, ever cigarette and ever shisha smoking.
- After statistical analysis, this difference however was only significant for ever shisha smokers, indicating that more affluent students had a higher prevalence of trying shisha.
- One quarter of students who were ineligible for free school meals had tried shisha.

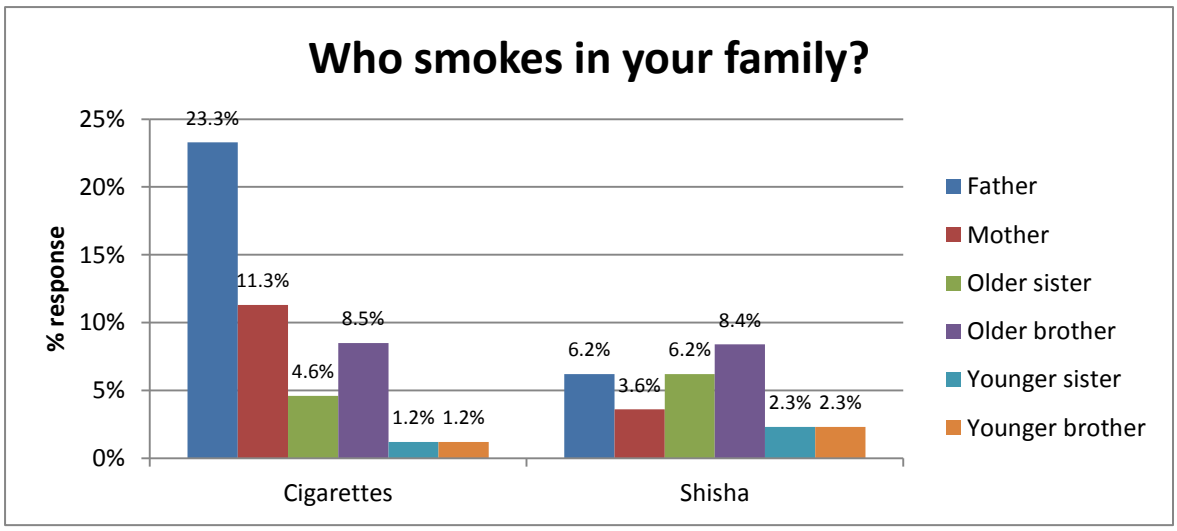
SUMMARY: Whilst cigarette smoking prevalence among young people in Brent is slightly lower than the national average, the trend showing increasing prevalence with age is similar to the national trend. This data also suggests acceptance and possibly preference for an alternative tobacco product among young people in Brent which is true for both genders and across ethnicities, but in particular Middle Eastern and South Asian ethnicities.

RECOMMENDATION: Given the growing body of evidence which explores harm relating to shisha, results for both forms of tobacco should be given serious consideration. Health promotion activities relating to different tobacco products should be culturally appropriate.

Risk of smoking initiation in Brent:

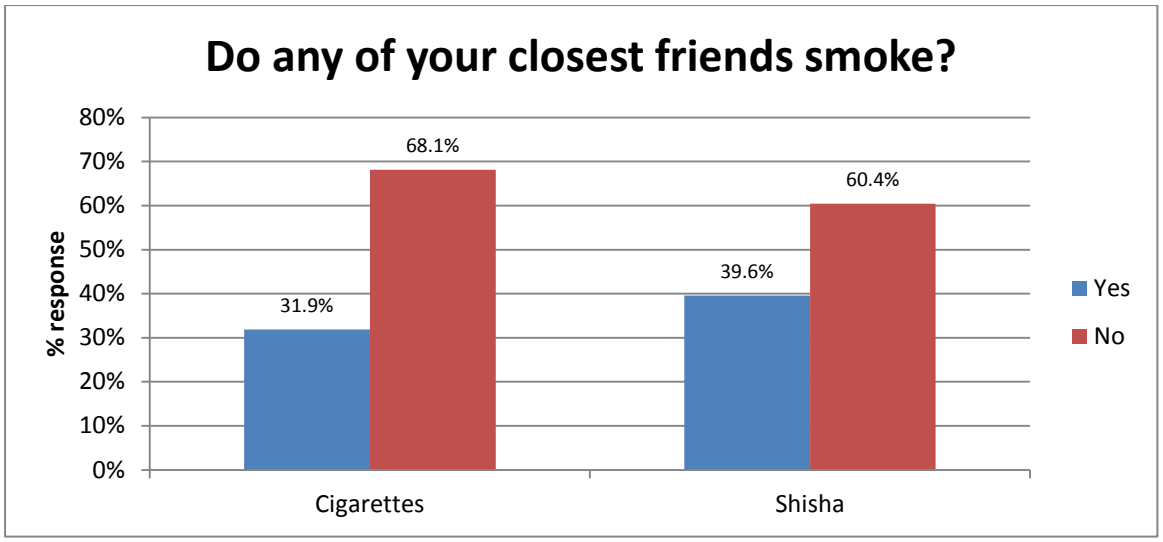
The wider literature reports that smoking initiation is associated with a wide range of risk factors including: parental and sibling smoking, the ease of obtaining cigarettes, smoking by friends and peer group members, socio-economic status, exposure to tobacco marketing, and depictions of smoking in films, television and other media (13). The following section will explore the influence of parental, sibling and friends' smoking in Brent.

Graph 7: Smoking among family members (cigarettes n=2823; shisha n=2823)



- 36.5% of the young people surveyed in Brent reported that at least one family member smoked cigarettes
- 18.6%reported at least one family member smokes shisha
- Of those who smoked in the family, cigarette smoking was most common amongst a student's father or mother, while shisha smoking was most common amongst a student's n older brother, older sister and father.
- Statistical analysis showed that compared to those who didn't have family members that smoked, young people in Brent were *four times* as likely to smoke cigarettes if a family member smoked tobacco and *four times* more likely to smoke shisha if a family member smoked tobacco

Graph 8: Smoking among friends (cigarettes n=2787; shisha n=2753)



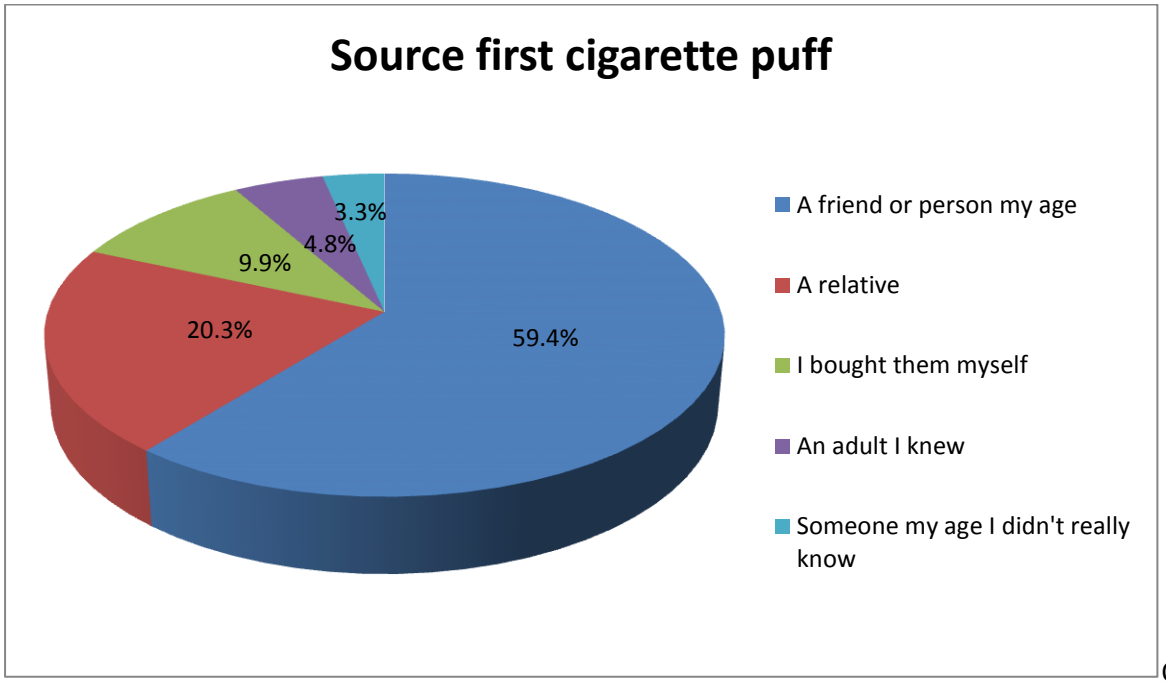
- Approximately one third of respondents had close friends that smoke cigarettes
- Almost 40% had friends that smoke shisha
- Statistical analysis showed that compared to those who didn't have friends that smoked, young people in Brent were *six times* more likely to smoke cigarettes if their friends smoked tobacco and *ten times* more likely to smoke shisha if their friends smoked tobacco

SUMMARY: In line with the wider literature this data suggests that young people in Brent are significantly more likely to smoke any kind of tobacco if either family or friends smoke. Smoking status of friends was a particularly strong precursor for smoking uptake for both cigarettes and shisha. The data also suggests a possible reduced harm perception relating to shisha smoking.

RECOMMENDATION: The particular impact that peer influence appears to have on smoking status would support the implementation of robust, evidence-based peer education programmes. This evidence also highlights the importance of continued efforts to assist adults to stop smoking as a means of trying to reduce the number of young people who start smoking, and the need to educate both adults and young people on the harms of shisha as well as the harms of cigarettes.

Accessing Cigarettes and Shisha

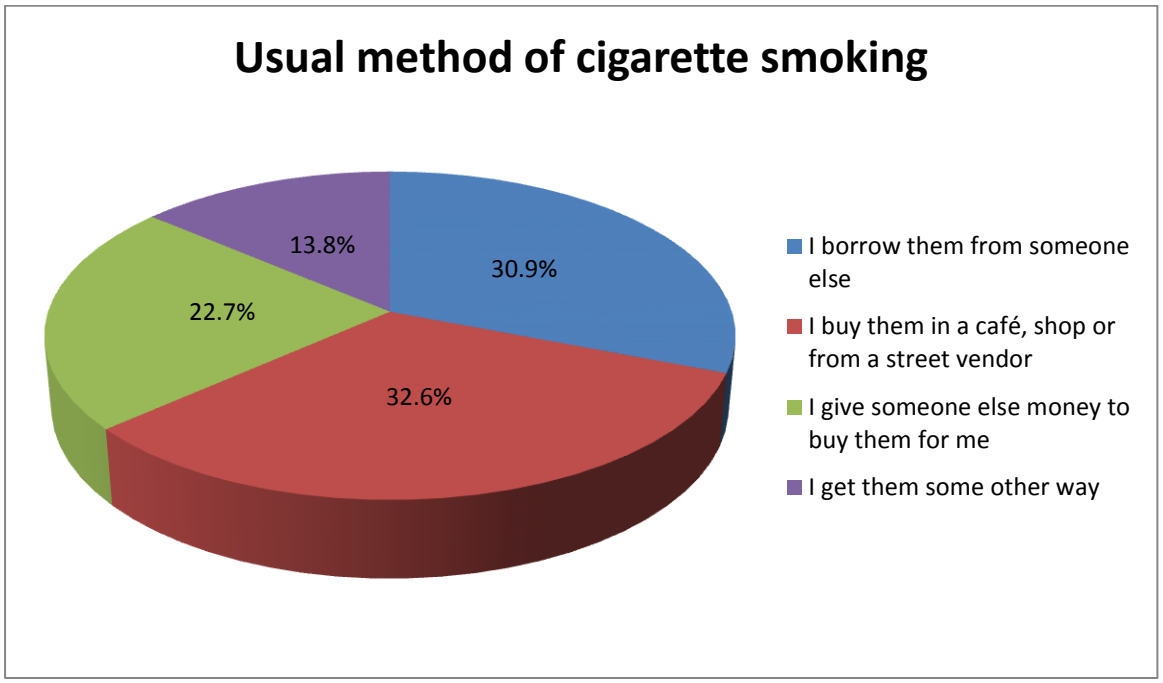
Graph 9: Source of first puff of ever cigarette smokers (n=454)



Of those who have tried cigarettes:

- The majority stated that the source of their first puff was a friend or person their own age
- A quarter of respondents stated that they got their first puff from a relative or adult they knew
- Rarely were Brent's young people introduced to smoking by a person their age that they didn't know and only a small proportion bought the cigarettes themselves

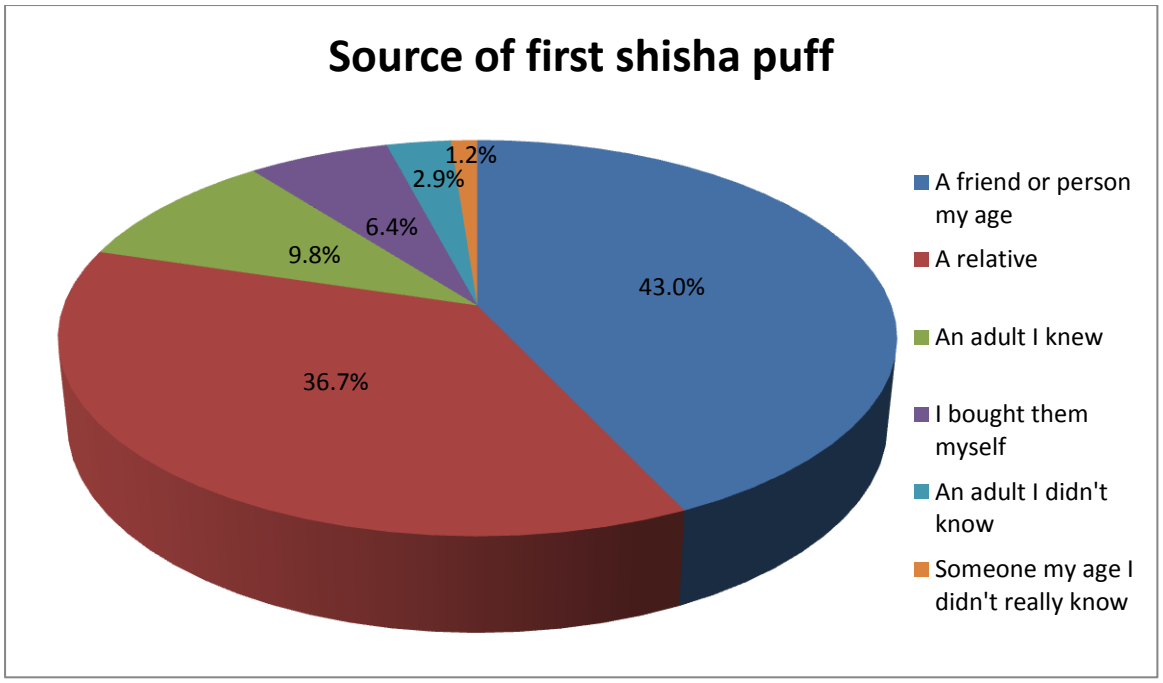
Graph 10: Usual method of smoking of cigarette smokers (n=181)



Of those that continue to smoke cigarettes:

- 32.6% state they buy cigarettes from a 'café, shop or street vendor'
- 30.9% stated they borrow them from someone else
- Approximately one fifth stated that they give someone else money to buy them for them

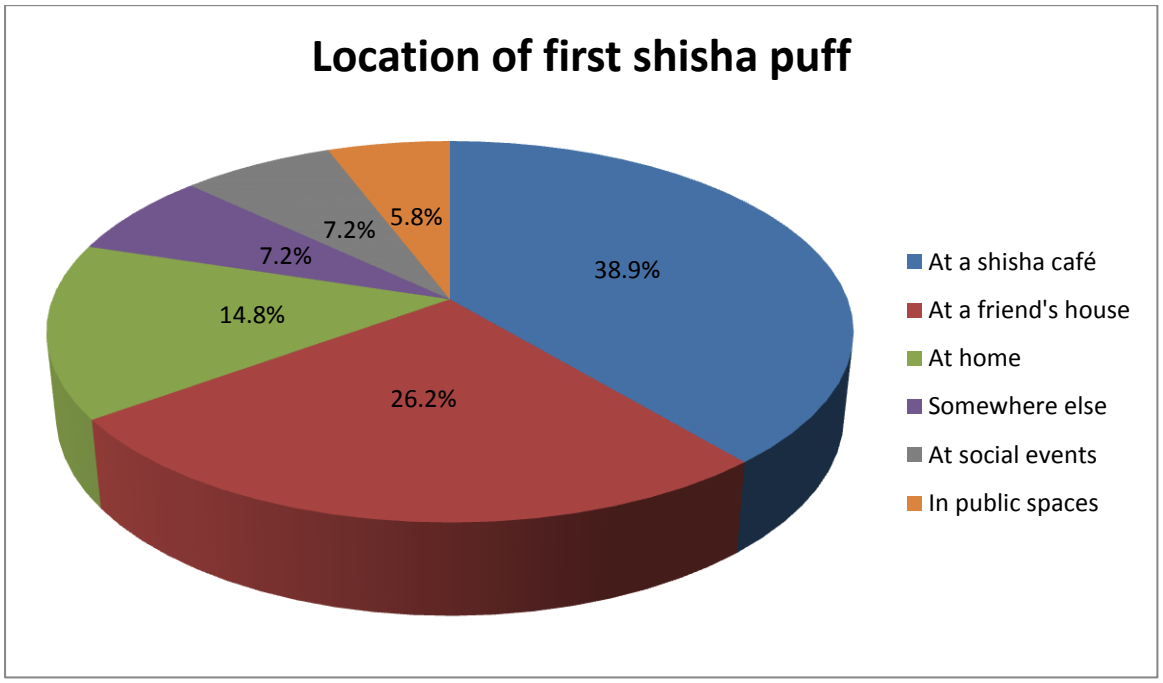
Graph 11: Introduction method to first puff of ever shisha smokers (n=656)



Of those who had tried shisha:

- 46.5% stated that their first source of shisha was via either a relative (36.7%) or adult they knew (9.8%)
- An additional 43.0% first sourced shisha through a friend or person their own age
- Similar to cigarettes, very few bought their first shisha themselves, and very few sourced it from adults or people their own age that they didn't know

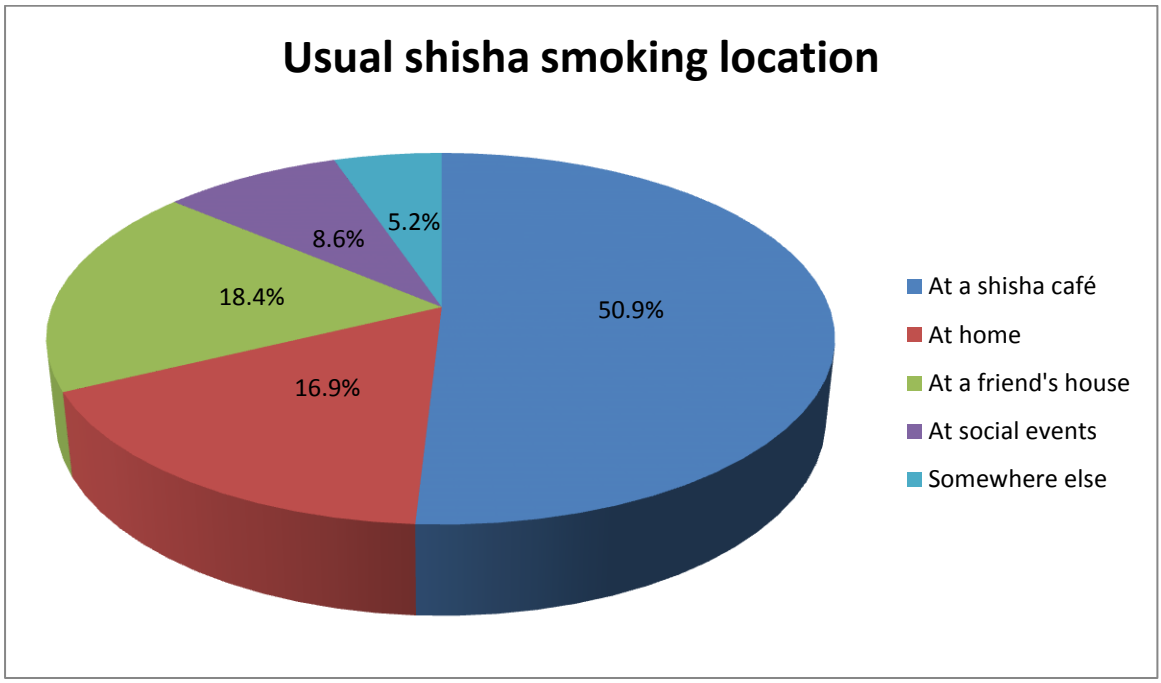
Graph 12: Location of first puff of ever shisha smokers (n=656)



Of those who had tried shisha:

- The majority first smoked shisha at a shisha café
- A large proportion also first smoked shisha at a friend's house
- It appears that even though a large proportion of shisha smokers first tried shisha in a shisha café (Graph 11), few actually bought it themselves (Graph 10)

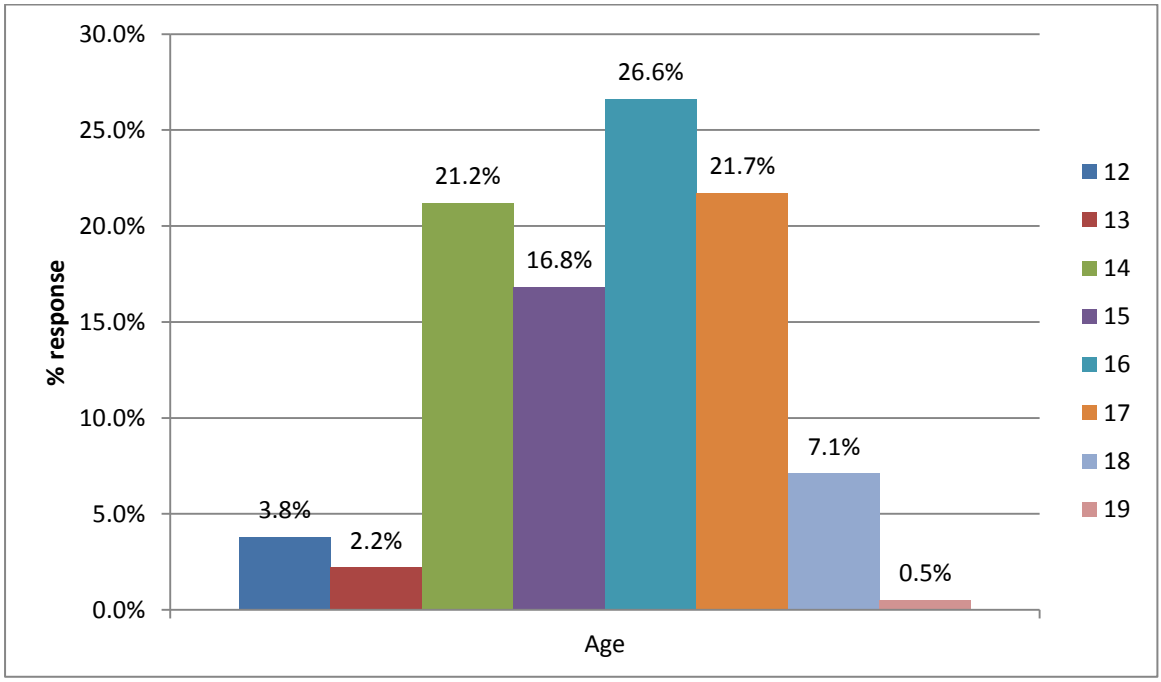
Graph 13: Usual smoking location of current shisha smokers (n=385)



Of those who continue to smoke shisha:

- 50.9% stated they usually smoke at a shisha café
- The next most popular locations for shisha smoking were either in one's home (16.9%) or at a friend's house (18.4%)

Graph 14: Usual shisha smoking at a shisha café (current shisha smokers) by age (n=184)



Interpretation: 3.8% of 12 year old current shisha smokers usually smoke at a shisha café

- Despite tobacco sales to those under the age of 18 being illegal an alarming number of under 18's continue to smoke in shisha cafes

SUMMARY: Whilst the majority of respondents stated that they sourced their first cigarette puff from a friend or person their age, obtaining shisha for the first time was almost equally distributed between friends and relatives or adults respondents knew alike. This could suggest again, a reduced harm perception relating to shisha. It appears that even though a large proportion of shisha smokers first tried shisha in a café, few actually bought it themselves. Smokers as young as 12 years old have reported that they continue to obtain shisha from a café.

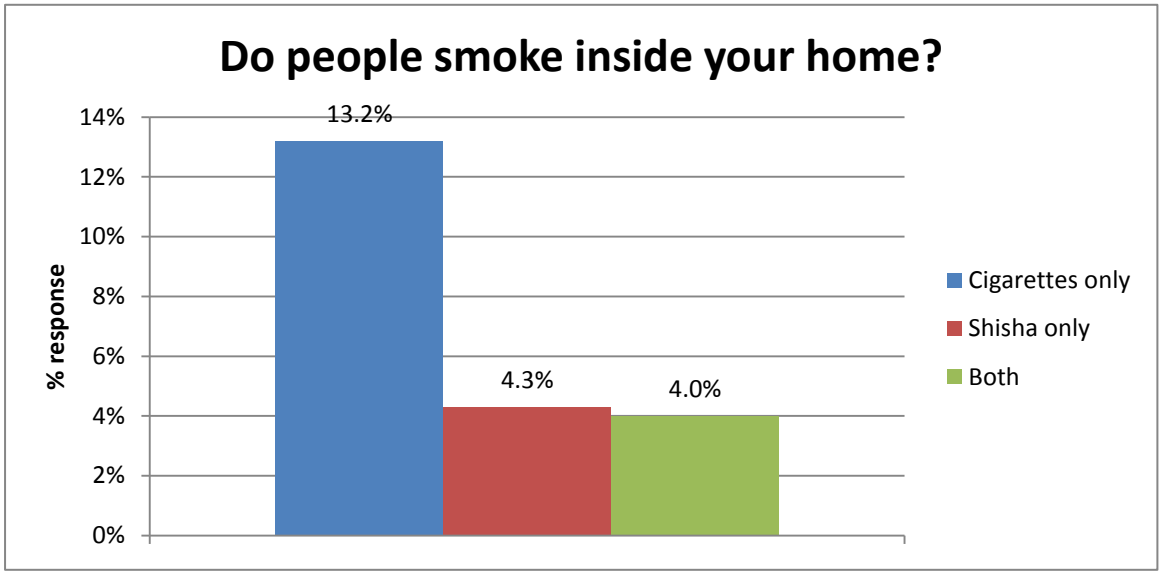
RECOMMENDATION: Continued enforcement action, particularly around preventing under-age sales and proxy sales of tobacco is highly recommended. In addition, information on the harms of smoking shisha needs to be communicated to both adults and young people to address the issue of reduced harm perception.

Exposure to second hand smoke in the home

Breathing other people's smoke causes both short and long term health problems. Immediate effects include eye irritation, cough, dizziness and nausea. Longer term exposure significantly increases the risk of death from lung cancer and from coronary heart disease. For people who already have asthma or coronary heart disease, other people's smoke can trigger more severe symptoms. A child exposed to second-hand smoke has an increased risk of sudden infant death ('cot death'), asthma, wheeze, lower respiratory infection, middle ear disease and meningitis.

The 2008 Health Survey for England revealed that approximately a quarter of 4 – 15 year olds reported being exposed to second hand cigarette smoke in their own home(14).. The following graph relates to our 2012 Brent sample.

Graph 15: Smoking inside the home with dual users shown (n=2800)



- Approximately a quarter of all respondents reported that people smoked inside the home. This can be separated into 13.2% stated people smoked only cigarettes in the home, 4.3%

stated people smoked shisha only in the home and a further 4% stated that both cigarettes and shisha were smoked in the home

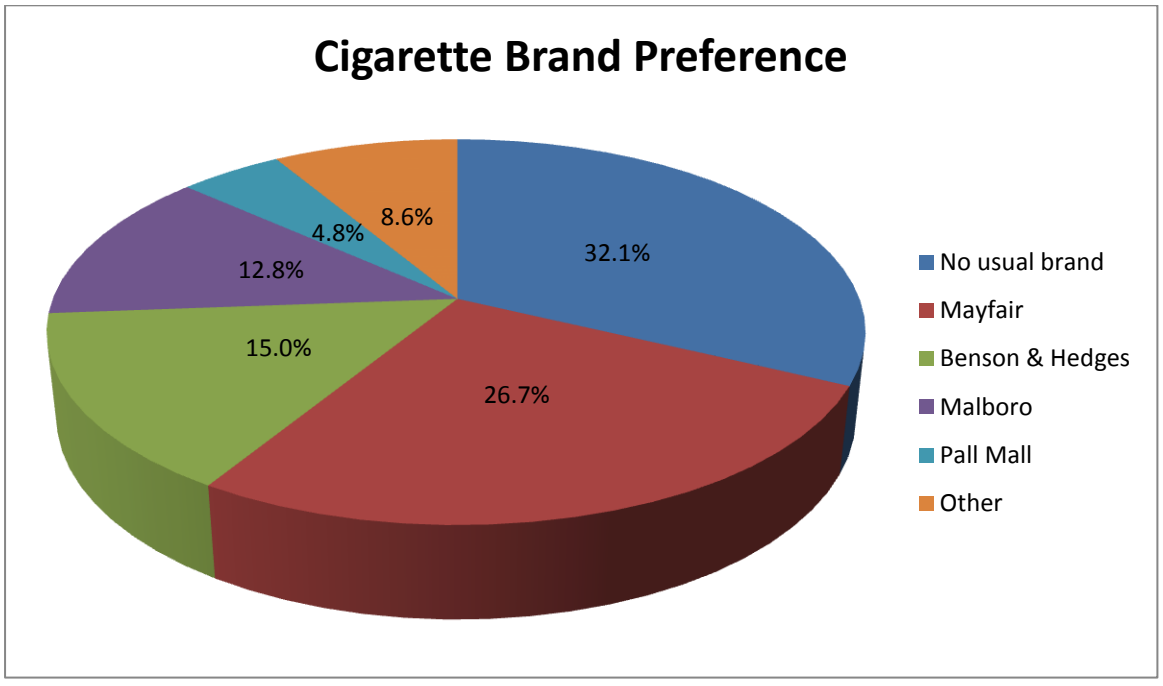
SUMMARY: Whilst these figures show a marked reduction in exposure to second hand cigarette smoke in the home (compared to the 2008 national statistics), the added exposure of this sample to second hand shisha smoke brings these figures back in line with the figures reported in the 2008 Health Survey for England. Referring back to Graph 5, these figures could also suggest that of family members who smoke cigarettes (36.5%), approximately half smoke inside the home (17.2%). It could also suggest similarly that of family members that smoke shisha (18.6%) almost half (8.3%) also smoke inside the home.

RECOMMENDATION: A comprehensive scheme of work around promoting the effects of second hand smoke (both cigarettes and shisha) and promotion of smokefree homes is urgently required in Brent.

Cigarette Brand Preference

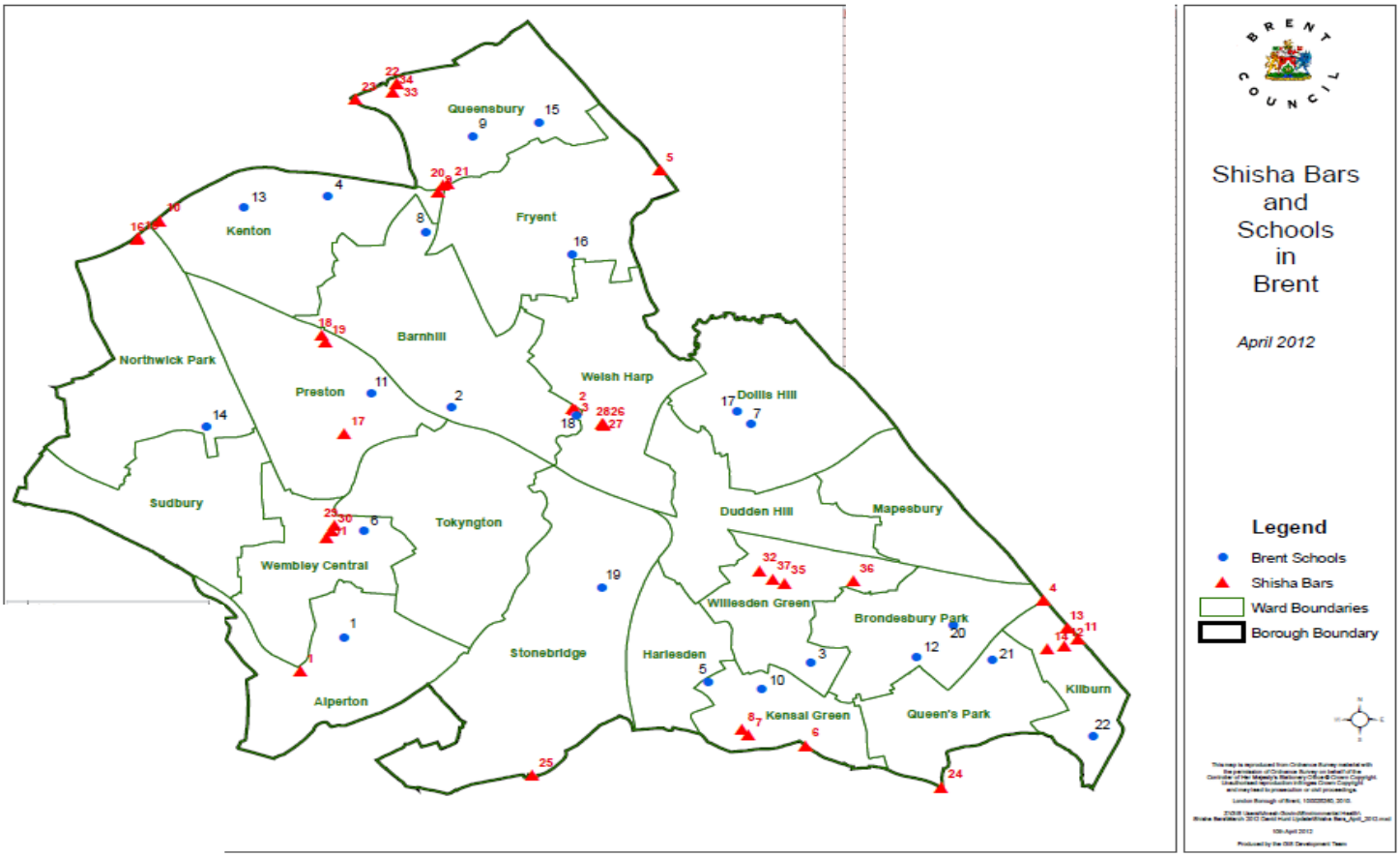
Evidence suggests that children are more likely to be attracted by designed tobacco packs. The United Kingdom is currently considering the introduction of standardised packaging of tobacco products. Brent participated in the consultation citing data from this report.

Graph 16: Cigarette brand preference (n=187)



- Two thirds of Brent respondents stated that they had a preference for one brand or another
- Brand preference followed a price related trend, with greater preference being aligned with cheaper price. This was true for all brands except Pall Mall, which, despite its low cost, remained unpopular
- Whilst one third of respondents stated that they had no brand preference, over half of these respondents stated they didn't buy their own cigarettes

Shisha and proximity to schools



- 95% of schools had on average, between 1.2 and 5.8 cafes within a 1 mile radius
- After controlling for age, gender, ethnicity and eligibility for free school meals, students from a school that had more than one shisha café within a 0.5 mile radius were twice as likely to be current shisha smokers than students from schools that had no shisha cafes within a 0.5 mile radius.

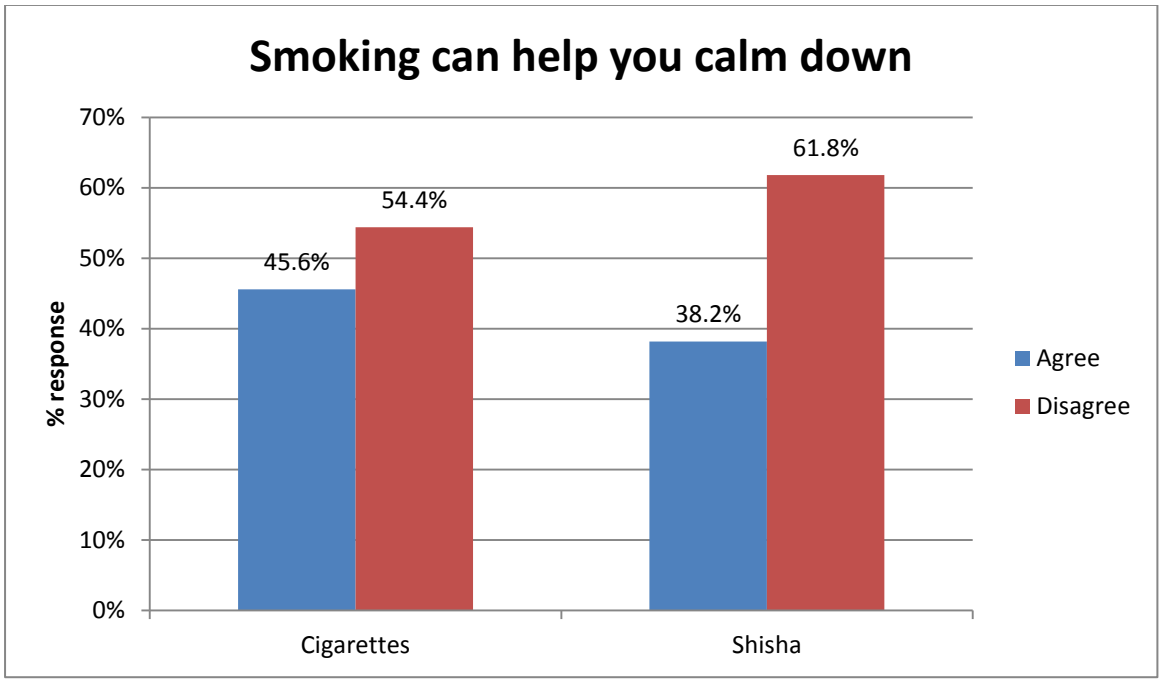
SUMMARY: Schools that have a number of shisha cafes in close proximity were more likely to have higher shisha smoking prevalence.

RECOMMENDATIONS: Schools that have more shisha cafes within a 0.5 mile radius may want to provide shisha smoking health awareness sessions to their students as they are at increased likelihood of smoking shisha. This is most likely due to increased accessibility during the lunch hour or after school. Inclusion of restrictions relating to placement of shisha cafes in close proximity to schools should be considered in Brent Council planning policy and strategy and the Local Development Framework.

Attitudes to smoking

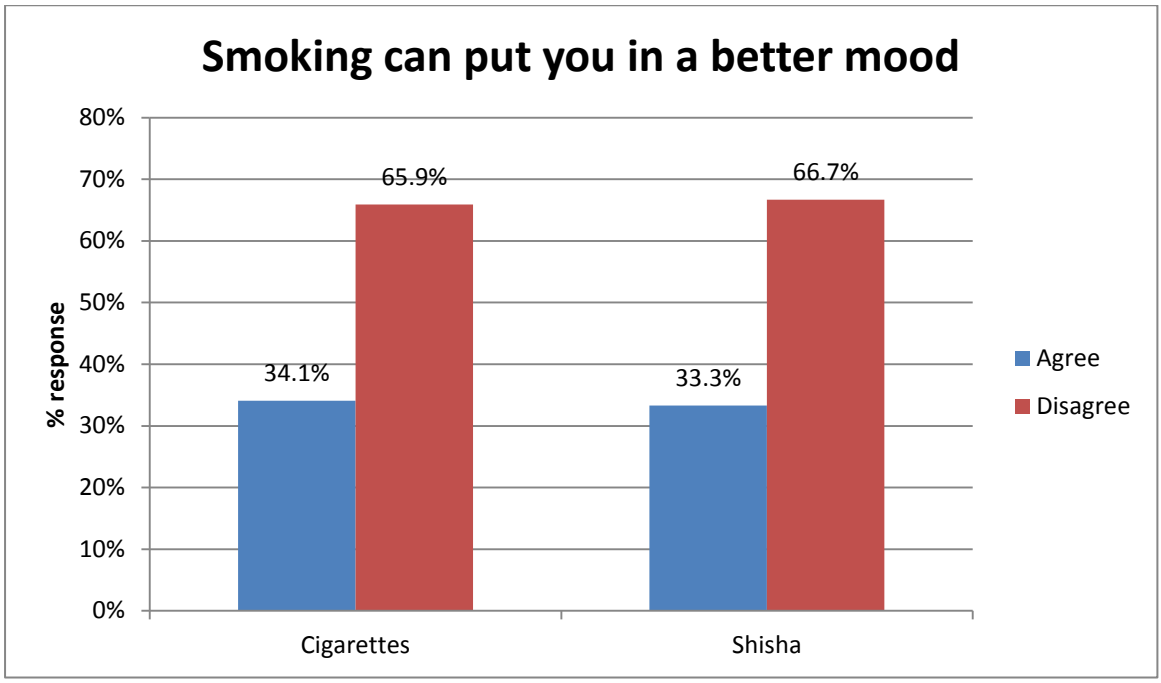
Respondents were asked a series of questions on their perceptions of smoking cigarettes and shisha. A handful of the most striking answers are detailed here:

Graph 17: Perceived relaxation (cigarettes n=2675; shisha n=2575)



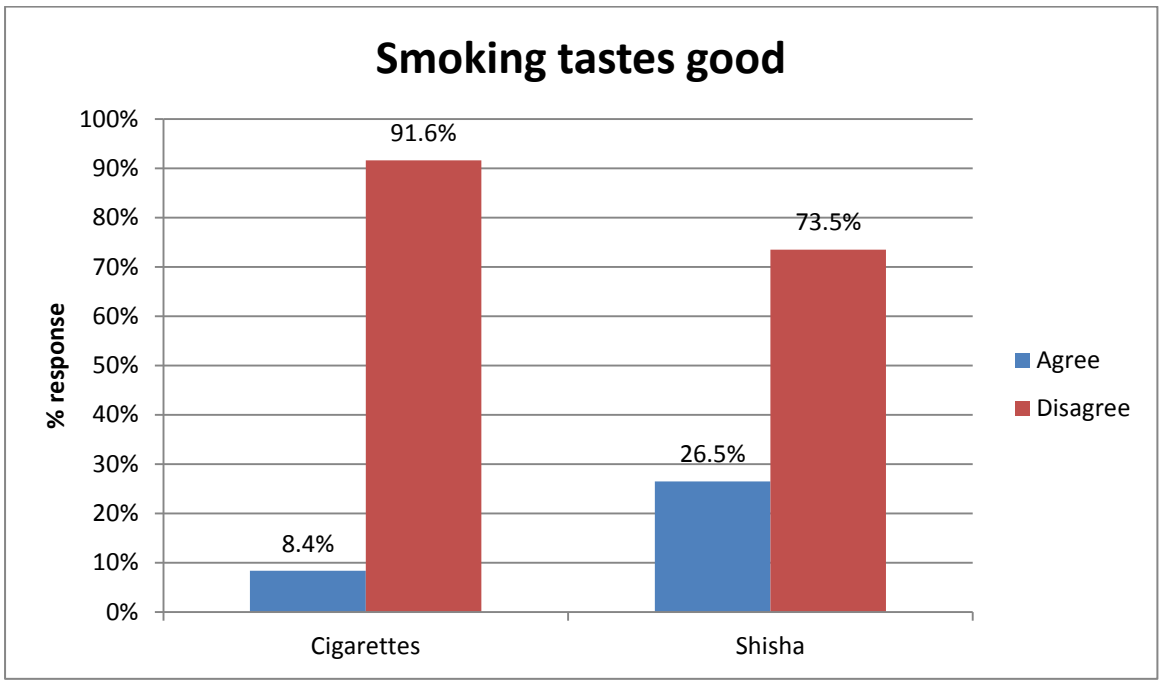
- Almost half of all respondents stated they thought cigarettes help you calm down and two fifths thought that shisha helps you to calm down
- There is a common misperception that smoking helps to calm you down, however it is nicotine cravings between cigarettes that make people feel anxious hence when they smoke they feel calmer

Graph 18: Perceived mood alteration (cigarettes n=2660; shisha n=2563)



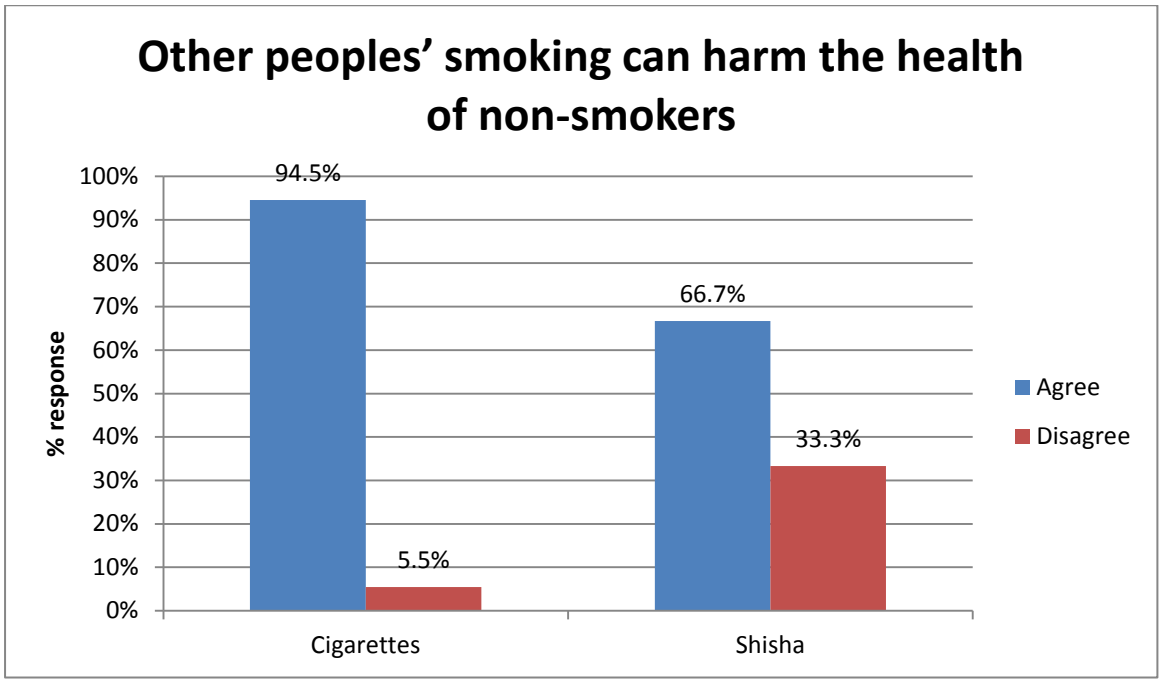
- Over one third of respondents thought that smoking (both shisha and cigarettes) can put you in a better mood

Graph 19: Perceived taste (cigarettes n=2627; shisha n=2550)



- Whilst respondents didn't generally think that cigarettes tasted good, a higher proportion thought that shisha tasted good

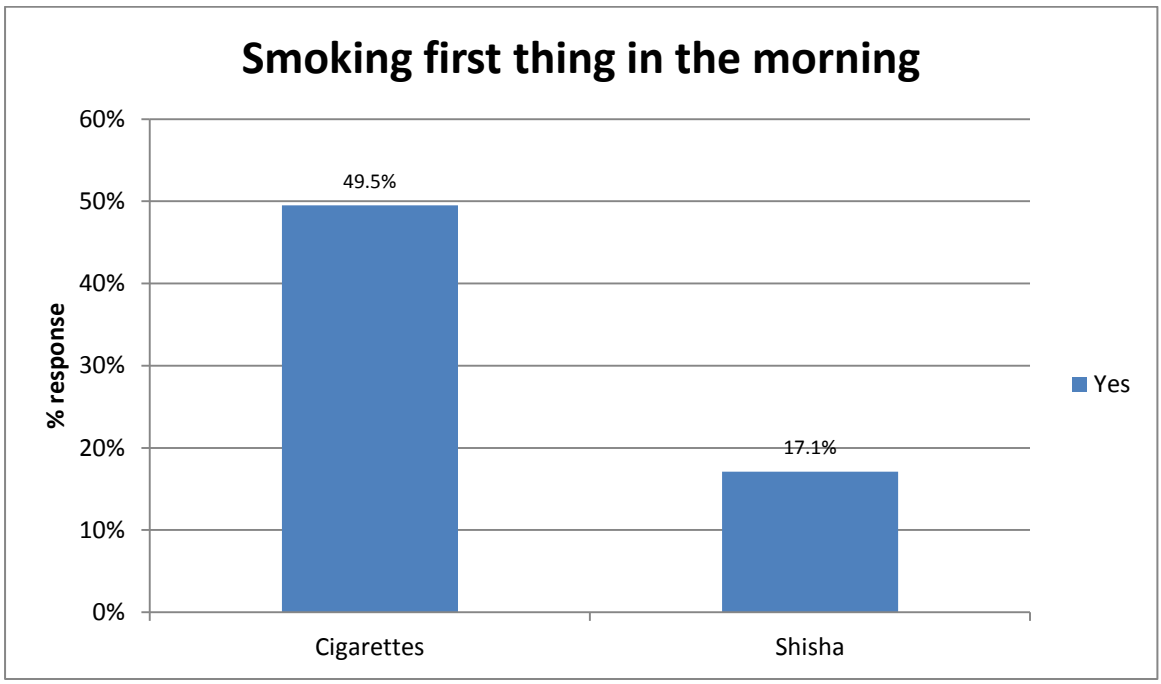
Graph 20: Second-hand smoke (cigarettes n=2728; shisha n=2596)



- Whilst the vast majority of respondents thought that second hand cigarette smoke could harm the health of non-smokers, one third of respondents did not agree that second hand shisha smoke could harm the health of non-smokers

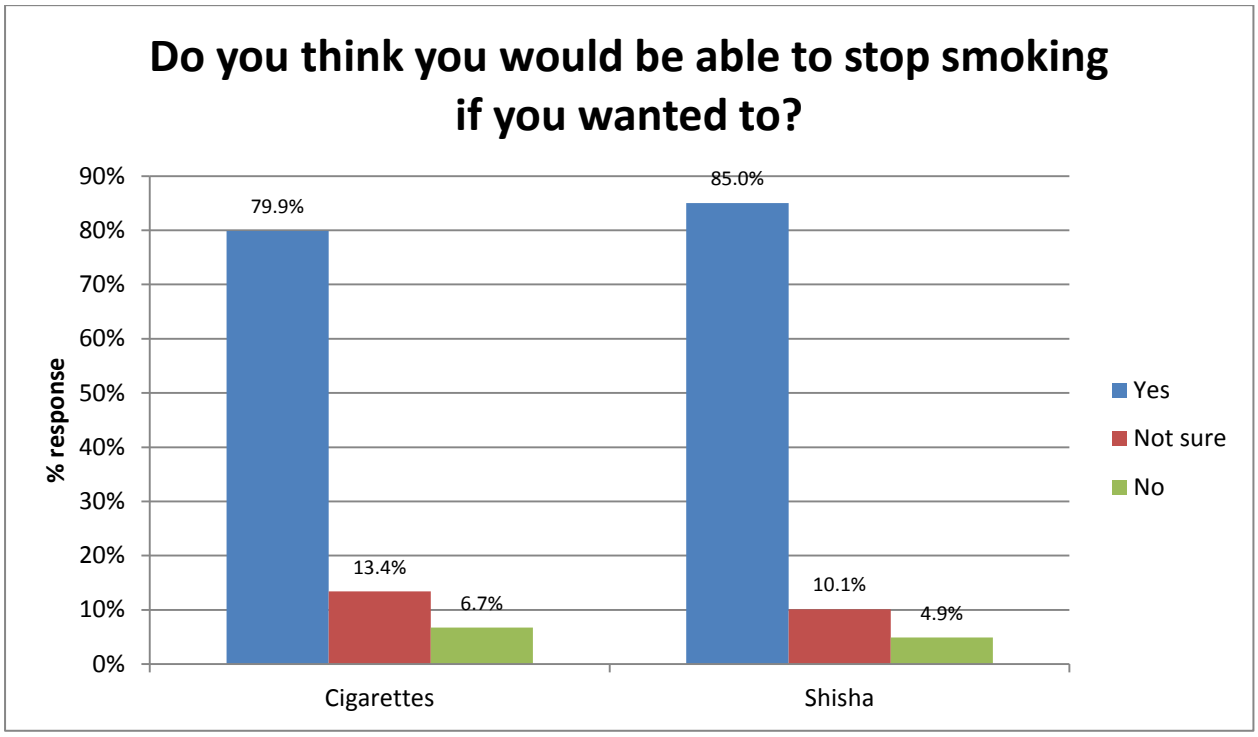
Smoking Cessation

Graph 21: Smoking first thing in the morning among current smokers (cigarettes n=98; shisha n=223)



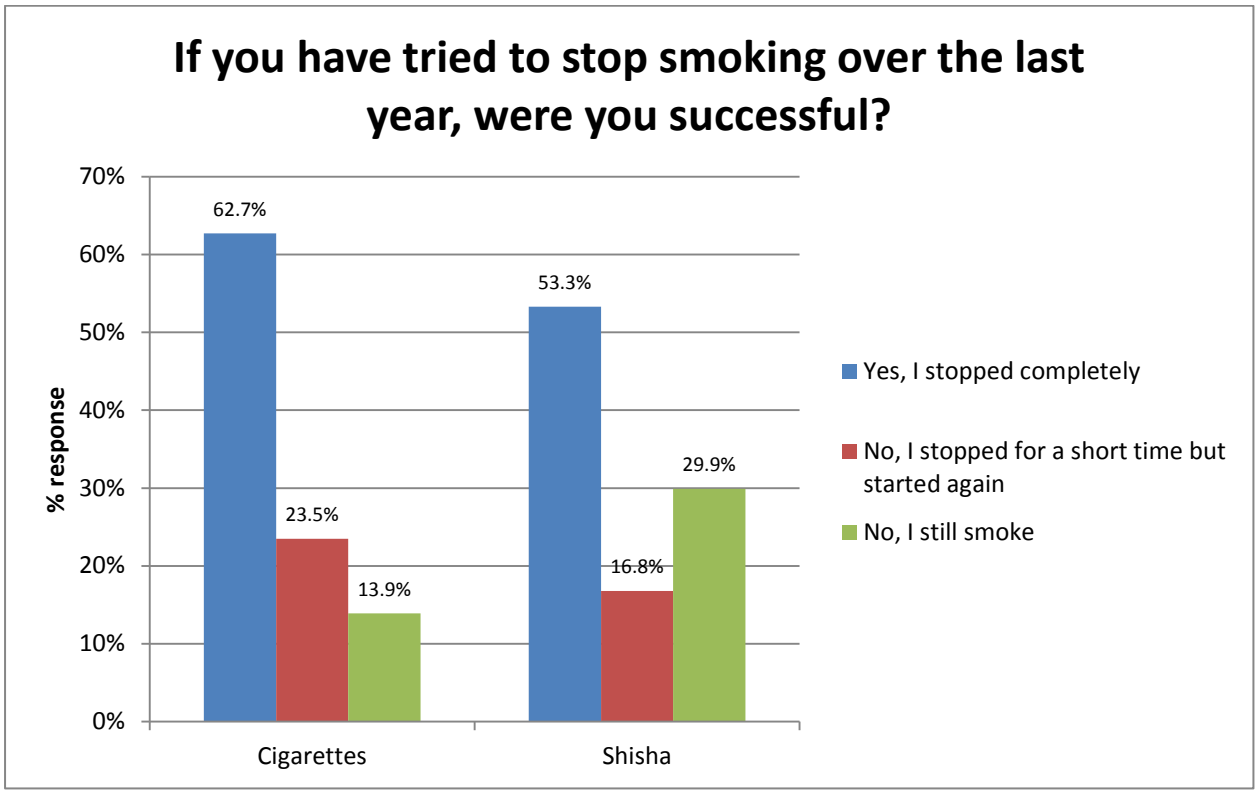
- Time to first cigarette in the morning is one tool used to understand a smoker's level of dependence on nicotine
- Half of the current smokers surveyed stated that they smoked cigarettes first thing in the morning
- Surprisingly 17.1% of current shisha smokers also stated that they smoke shisha first thing in the morning

Graph 22: Cessation belief (cigarettes n=164; shisha n=306)



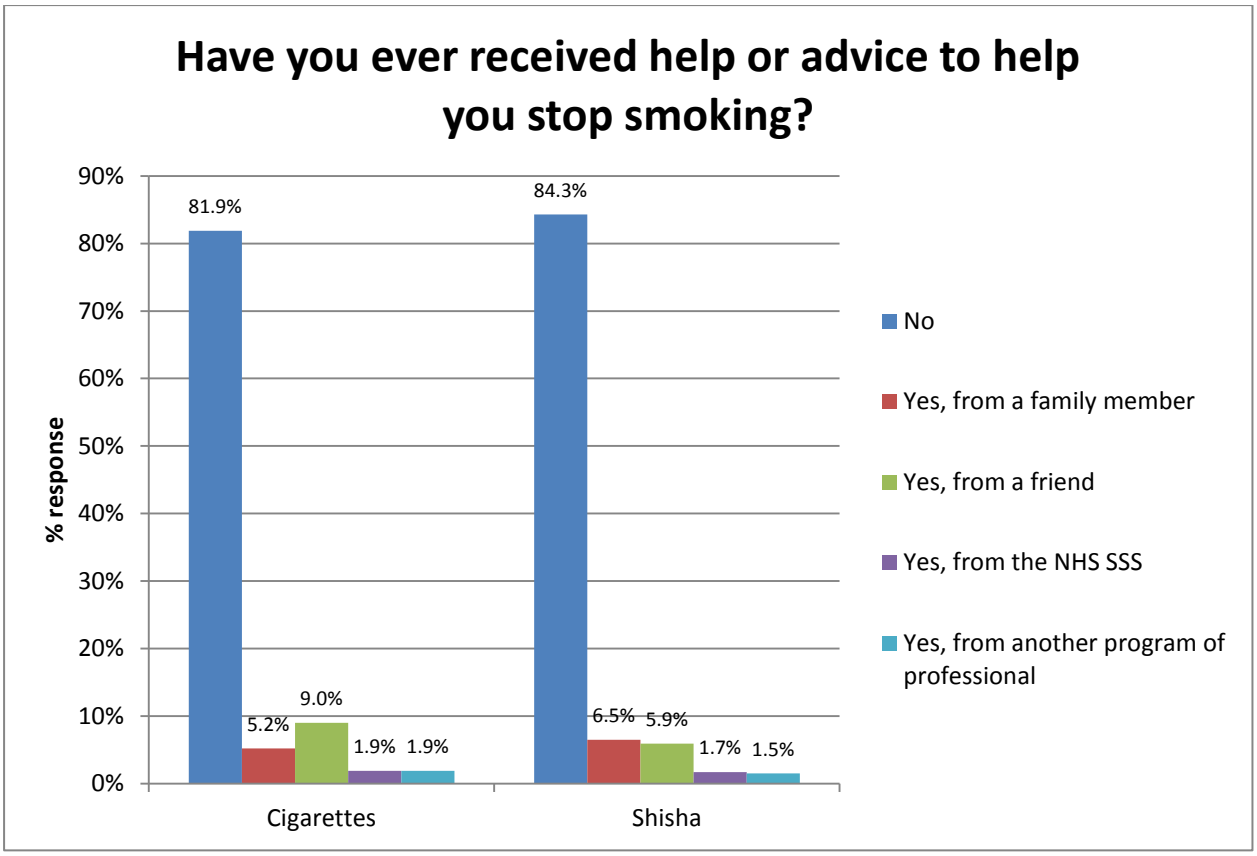
- 79.9% of respondents stated they thought they would be able to stop smoking cigarettes and 85.0% of respondents thought they would be able to stop smoking shisha if they wanted to

Graph 23: Smoking cessation attempts (cigarettes n=166; shisha n=197)



- Of those who tried to stop smoking cigarettes in the past year 37.3% were unsuccessful
- Of those who tried to stop smoking shisha in the past year 46.7% were unsuccessful

Graph 24: Cessation help (cigarettes n=466; shisha n=657)



- The vast majority of respondents that answered this question did not actively receive help or advice to stop smoking. Of those who did, family members or friends were the most likely sources of cessation support.

SUMMARY: If smoking first thing in the morning is used as a proxy indicator for nicotine dependence, a sizeable proportion of this sample show signs of relatively strong addiction. Despite a majority stating that they think they would be able to quit, a large proportion of those who did attempt to quit in the last year were unsuccessful. Furthermore, it appears that young people in Brent rarely go to trained professionals for stop smoking support. Reasons for this need further exploration.

RECOMMENDATIONS: The local stop smoking service should investigate innovative ways of engaging with young people to encourage and enable smoking cessation in line with young peoples' needs.

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