Background data quality report

Smoking, Drinking and Drug Use among Young People in England
2018

Published 20 August 2019
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All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority’s regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is NHS Digital’s responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Introduction

This document constitutes a background quality report for *Smoking, Drinking and Drug Use Amongst Younger People in England* (SDD). The statistics included in this release are the latest available figures at the time of publication.

Background

Context

This is the latest in the series of surveys of secondary school children in England which provides the national estimates of the proportions of young people aged 11 to 15 who smoke, drink alcohol or take illicit drugs. As well as providing prevalence rates it also provides information on sources of cigarettes, alcohol and illicit drugs as well as attitudes towards their use.


Purpose of document

This paper aims to provide users with an evidence based assessment of quality of the statistical output included in this report.

It reports against those of the nine European Statistical System (ESS) quality dimensions and principles¹ appropriate to this output. In doing so, this meets NHS Digital’s obligation to comply with the UK Statistics Authority (UKSA) Code of Practice for Statistics², and the following principles in particular:

- Trustworthiness pillar, principle 6 (Data governance) which states “Organisations should look after people’s information securely and manage data in ways that are consistent with relevant legislation and serve the public good.”
- Quality pillar, principle 3 (Assured Quality) which states “Producers of statistics and data should explain clearly how they assure themselves that statistics and data are accurate, reliable, coherent and timely.”
- Value pillar, principle 1 (Relevance to Users) which states “Users of statistics and data should be at the centre of statistical production; their needs should be understood, their views sought and acted upon, and their use of statistics supported.”
- Value pillar, principle 2 (Accessibility) which states “Statistics and data should be equally available to all, not given to some people before others. They should be published at a sufficient level of detail and remain publicly available.”

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¹ The original quality dimensions are: relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, and coherence and comparability; these are set out in Eurostat Statistical Law. However more recent quality guidance from Eurostat includes some additional quality principles on: output quality trade-offs, user needs and perceptions, performance cost and respondent burden, and confidentiality, transparency and security.

Assessment of statistics against quality dimensions and principles

Relevance

*This dimension covers the degree to which the statistical product meets user needs in both coverage and content.*

*Towards a smoke-free generation: tobacco control plan for England* mentions SDD as the source of information on children smoking and one of the objectives stated in the plan is to “reduce the number of 15 year olds who regularly smoke from 8% to 3% or less”. Progress against this objective will be measured by this survey.

It is also used to monitor indicator 2.09 at national level in the Public Health Outcomes Framework (PHOF) [http://www.phoutcomes.info/](http://www.phoutcomes.info/).

The report covers England only.

Accuracy and reliability

*This dimension covers, with respect to the statistics, their proximity between an estimate and the unknown true value.*

As the data are based on a sample (rather than a census) of pupils, the estimates are subject to sampling error. Appendix B details how to calculate sampling errors for this survey, and the excel tables include true standard errors and design effects calculated for key survey estimates.

In general, attention is drawn to differences between estimates only when they are significant at the 95% confidence level, thus indicating that there is less than 5% probability that the observed difference could be due to random sampling variation when no difference occurred in the population from which the sample is drawn.

The limitations of the survey estimates are discussed in appendix B.

The mode used to collect survey data on smoking, drinking and use of illicit drugs can affect how pupils may answer the questions. For example they may be more willing to admit to some of these behaviours in surveys conducted away from the pupils home. Previous analysis has shown SDD to provide the most accurate measures of undertaking in risky behaviours as it is conducted away from the home environment. More information is available in section A8 of *Health and Wellbeing of 15-year-olds in England - Main findings from the What About YOUp? Survey 2014*.

There is information on comparisons with other sources at the end of parts 1, 5 and 8.
**Timeliness and punctuality**

*Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.*

The survey relates to the academic autumn term of 2018. However, fieldwork was extended into January 2019 as the response rate was low by the end of 2018. This is discussed more fully in appendix B.

The release of this publication was delayed from 25th July to 20th August 2019, due to operational reasons. Data has been published within 9 months of the end of the period which they refer to.

The section on coherence and comparability explains how the survey mode by which these questions are asked can influence how a pupil may answer them.

The survey asks about awareness and usage of a fictional drug called Semeron. Responses to these questions provide a guide as to how much pupils are over-estimating so it is reassuring to see that in the 2018 survey only 24 pupils (0.2% of all pupils) admitted to taking Semeron which is in line with previous surveys and suggests that only a tiny minority of pupils maybe falsely admitting to drugs use. However, 1,717 pupils (13%) said they had heard of Semeron which suggests awareness of drugs could be over-estimated. Hence the majority of the tables in this report focus on drug usage rather than drug awareness.

**Accessibility and clarity**

*Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.*

All reports are accessible on the NHS Digital website as PDF documents. All tables in the report are provided in Excel format. These documents are available at [http://digital.nhs.uk/pubs/sdd18](http://digital.nhs.uk/pubs/sdd18).

The publication may be requested in large print or other formats through the NHS Digital’s contact centre: [enquiries@nhsdigital.nhs.uk](mailto:enquiries@nhsdigital.nhs.uk) (please include ‘SDD’ in the subject line).

NHS Digital has produced SDD reports since 2004. Prior to this the Department of Health produced these reports. The DH reports are available [here](#).

**Coherence and comparability**

*Coherence is the degree to which data which have been derived from different sources or methods but refer to the same topic are similar. Comparability is the degree to which data can be compared over time and domain.*

**Survey topic content**

The first survey in the series, carried out in 1982, measured the prevalence of smoking among pupils and described their smoking behaviour. Trends in smoking were monitored by similar surveys carried out every two years. Questions on alcohol consumption were
added to the survey in 1988. The 1998 survey was the first to include questions on the prevalence of drug use.

Break in time series: change to alcohol questions 2016

The question wording which is used both for the “ever drunk alcohol” prevalence indicator and as a filter question for further questions about alcohol use changed from 2016. Previously the question wording was “Have you ever had a proper alcoholic drink – a whole drink, not just a sip? Please don’t count drinks labelled low alcohol?”

However, during cognitive testing of the survey pupils expressed confusion around the terms “proper alcoholic drink” and “low alcohol”. Some pupils reported excluding alcopops and cocktails containing alcohol as they generally tasted of fruit rather than alcohol. As a result it was decided to remove those terms and therefore the question became “Have you ever had an alcoholic drink - a whole drink, not just a sip?”.

Therefore, whilst this change of wording will deliver a better estimate of the number of children who do drink alcohol it does mean that the results from 2016 are not comparable with previous years. The chapters which include estimates based on the alcohol questions and the tables they are based on have been annotated to mention this. To a lesser extent, this may also affect estimates produced from other alcohol related questions. This is because a slightly wider group of children will now answer these questions, who may have been filtered out of the further alcohol questions based on the previous wording.

Break in time series: mean number of units drunk on each drinking day (part 5)

The ranges for the mean number of units on each drinking day have been updated from 2016 to provide a more precise measure, and so data is not comparable with previous years.

Ranges and inclusions up to 2014:

- Less than 1 unit – included 0 thru 0.49
- 1 or 2 units – included 0.5 thru 2.49
- 3 or 4 units – included 2.5 thru 4.49
- More than 4 units – included 4.5 and above

Ranges and inclusions from 2016:

- Less than 1 unit – as described
- 1 unit, to less than 3 units – as described
- 3 units, to less than 5 units – as described
- 5 units or more – as described

Increase in drug prevalence (2016)

The following should be taken into account when looking at changes over time for the drug prevalence measures in part 8; ever taken drugs, taken drugs in the last year and taken drugs in the last month (tables 8.1 to 8.8):

1. Questions on psychoactive substances, which include new psychoactive substances (NPS), previously known as legal highs, and Nitrous Oxide (laughing gas), were included in the calculation of the overall prevalence of drug use
measures (ever used, used in last year, used in last month) from 2016. Both are covered by the Psychoactive Substances Act 2016 which restricts the production and sale and supply of such substances.

When psychoactive substances are removed from the 2016 measure, the overall drug prevalence figure falls by 3 percentage points (24.3% to 21.3%). This adjusted version is included as an extra measure in the time series data shown in tables 8.6 to 8.8.

2. Since 2016, even when accounting for the addition of psychoactive substances to the measures, there has been a large and unexpected rise in the overall drug use prevalence reported; 14.6% in 2014, to 24.3% in 2016 and 23.7% in 2018.

Further investigations identified that some of this change has been driven by an increased likelihood since 2016 of pupils who said yes to having heard of individual drug types, then not going on to answer questions on whether they had tried them. The overall drug prevalence measure is derived using the responses from these individual drug types (see appendix C1), and so this results in a greater proportion of pupils being excluded from the denominator, as their drug use was considered to be unknown. A pupil not providing a response for just one of the 17 drug types asked about can result in them being excluded from the overall prevalence calculation; the proportion with an unknown overall drug use status increased from 8% in 2014, to 19% in 2016 (20% in 2018).

Cross checking with a further summary question pupils are asked on whether they had ever tried any drug, indicates that most of these pupils had not tried any drugs. Thus, the overall impact of having removed these pupils from the indicator would likely be to increase the prevalence rates.

Neither the reason for this, nor how much of the change in prevalence this accounts for, is clear. However, some level of genuine increase is still apparent. If the overall drug use prevalence figure were to be adjusted based on the response to the summary drug use question, then the estimated prevalence for 2016 would be 21.5%. However, due to the amount of uncertainty in deriving this figure, it has not been presented in the publication.

This also effects prevalence measures for individual drug types, though to a lesser extent. This is because a pupil not answering a question for one drug type (and so being excluded from the overall prevalence calculation), will not impact their inclusion for other drug types about which they did provide a response.

The changes in the proportions of pupils not answering questions for each individual drug type in 2014, 2016 and 2018 are shown below:
Table 1 – Proportion of pupils with non-responses to questions about drug use, by drug type
2014 to 2018

<table>
<thead>
<tr>
<th>Variable (drug type)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
</tr>
<tr>
<td>If used amphetamines</td>
<td>3.3</td>
</tr>
<tr>
<td>If used cannabis</td>
<td>2.7</td>
</tr>
<tr>
<td>If used cocaine</td>
<td>2.7</td>
</tr>
<tr>
<td>If used crack</td>
<td>2.5</td>
</tr>
<tr>
<td>If used ecstasy</td>
<td>2.6</td>
</tr>
<tr>
<td>If used glue, gas, aerosols or solvents (volatile substances)</td>
<td>2.9</td>
</tr>
<tr>
<td>If used heroin</td>
<td>2.3</td>
</tr>
<tr>
<td>If used ketamine</td>
<td>2.2</td>
</tr>
<tr>
<td>If used new psychoactive substances (previously known as legal highs)</td>
<td>-</td>
</tr>
<tr>
<td>If used LSD</td>
<td>2.2</td>
</tr>
<tr>
<td>If used mephedrone</td>
<td>2.3</td>
</tr>
<tr>
<td>If used magic mushrooms</td>
<td>2.6</td>
</tr>
<tr>
<td>If used methadone</td>
<td>2.6</td>
</tr>
<tr>
<td>If used nitrous oxide</td>
<td>-</td>
</tr>
<tr>
<td>If used other drugs</td>
<td>2.8</td>
</tr>
<tr>
<td>If used poppers</td>
<td>2.5</td>
</tr>
<tr>
<td>If used tranquillisers</td>
<td>2.1</td>
</tr>
<tr>
<td>If used any drugs (derived from all above)</td>
<td>7.8</td>
</tr>
<tr>
<td>If used any Class A drugs (derived from class A drug variables above)</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Other drug time series data in the report is not affected as it is derived from different questions e.g. usual frequency of drug use. The effected tables have been footnoted.

Trade-offs between output quality components

*This dimension describes the extent to which different aspects of quality are balanced against each other.*

Partaking in smoking, drinking alcohol or taking illicit drugs is self-reported by the pupil and therefore may be susceptible to “satisficing” where they give an answer which is more socially acceptable, i.e. to say they don’t do any of these things. Similarly they may be influenced to say they do partake in these behaviours in order to impress their peers.

Analysis of data from Health Survey for England showed that examining cotinine levels in saliva can lead to higher estimates of smoking prevalence amongst children than self-reported data. See the topic report on children’s smoking in the [2016 survey](#). However,
this is a costly way to collect this information and difficult to carry out in schools within the
time they are able to allocate to completion of the survey.

Assessment of user needs and perceptions

*This dimension covers the processes for finding out about users and uses and their views on the statistical products.*

The survey methodology, questionnaire and content of the report is discussed and agreed
with a steering group which contains representatives from NHS Digital, Department of
Health and Social Care, Public Health England, Home Office, Department for Education,
Local Government Association and a Local Authority as well as the contractor carrying out
the survey.

The content of the survey and report are often consulted on with the most recent SDD
consultation taking place in November 2015 and the results fed into the design of
subsequent surveys.

The main change to the 2018 survey was an update to the questions on pupil wellbeing in
order to standardise them with those used by the Office for National Statistics. This was
approved by the SDD steering group in November 2017.

The style of the report was also part of a wider consultation on outputs from NHS Digital.
The proposal for SDD was in section A8.

NHS Digital is keen to gain a better understanding of the users of this publication and of
their needs; feedback is welcome and may be sent to enquires@digital.nhs.uk (please
include ‘Smoking, Drinking and Drugs Survey’ in the subject line).

Performance, cost and respondent burden

*This dimension describes the effectiveness, efficiency and economy of the statistical output.*

Data were collected from pupils using a self-completion paper questionnaire. These were
usually completed during a single school period, generally between 30 and 40 minutes in
length. The time taken by individual pupils to complete the questionnaire was not recorded
and it is not possible to estimate an average. However, the allotted time was sufficient for
almost all pupils to answer the questionnaire in full.

The total cost of developing and running the survey and publishing the report is around
£450,000.

Confidentiality, transparency and security

*The procedures and policy used to ensure sound confidentiality, security and transparent practices.*

No personal/individual level information is received by NHS Digital or contained in the
report. The list of schools which take part is maintained by the survey contractor and not
known to NHS Digital.

The respondent level file available via the UK Data Service does not contain any
personally identifiable data and has undergone disclosure control measures to mitigate
against individuals being identified. It is also only disseminated under an End User Licence which contains terms and conditions on who can use the data and how the data may be stored and used. Specifically, the data can only be accessed by people from central or local government, Higher/Further Education and research charities. The terms and conditions also forbid onward sharing of the dataset and attempts to identify individuals.

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