Drugsfutures

Appendices to Main Report

Report for Academy of Medical Sciences

May 2007

working with you
to improve social results

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Appendix 1. Literature Review

Introduction

This literature review was a starting point for the research team at OPM in the *drugsfutures* project undertaken with the Academy of Medical Sciences. It was intended to serve three purposes.

First, we used the review to examine the importance, and growing use, of evidence based or informed policy in this field. This information was used to explain the project to external stakeholders and to members of the public during consultations. It was also important for the project team to understand, and more importantly be able to explain, the importance of, evidence-based policy.

Second, the review allowed us further insight into some of the methodological issues surrounding science-based engagement in this area. Papers such as the Home Office report 'Understanding problem drug use among young people accessing drug services' and the YoungMinds 'Guide for practitioners' outlined clearly the methodology they employed. Their work informed the development of our methodology when working with young people. To ensure full and open responses we ensured a safe and confidential environment in which young people could explain their honest understanding of drug use without fear of being judged or criticised.

Finally, the literature review outlined some examples of existing public opinion and clarified for us the diversity of opinion we were likely to encounter across all the themes. These findings are included in the body of the review.

It should be noted that the objective of this literature review was to look at the extent of public engagement projects on brain science, addiction and the three classes of drugs central to *drugsfutures*: cognition enhancers, drugs for mental health and recreational drugs. The public involved in the project covered a much greater range of issues, as can be seen from the main report. These include the need to situate the use of and attitudes towards drugs within the wider context of social attitudes towards mental health, social inequalities, the value of learning, and the need to protect individual choice. If the literature review had ranged over these issues too, there would no doubt be additional comparisons to be made between this work and previous projects.

Now that the research is complete, the following broad similarities and differences between our findings and those of previous researchers have emerged as being noteworthy.

Cognition enhancement

Previous research into public perceptions of cognition enhancers is limited. The little that has been done is generally small-scale, with an academic focus, and provides little insight into public views. One report reviewed was authored by Anders Sandberg, an expert who took part in the project's cognition enhancer workshop in Glasgow. His research suggested that society's stance towards cognitive enhancement is softening. He draws an analogy

between the rising acceptance of purely cosmetic plastic surgery and the use of cognition enhancement. Some participants in our public consultation also made the comparison between enhancing intellectual functions and enhancing the body, either through steroid-assisted bodybuilding or by cosmetic surgery. The findings from *drugsfutures* suggest that support for the widespread availability of cognition enhancers will be limited until a great deal more research has been done into their side-effects and the consequences of long-term use for both the individual user and society as a whole.

Drugs for mental health

Public engagement work on attitudes to drugs and mental health is also limited. Research reports such as those from the Sainsbury Centre for Mental Health have highlighted the stigma that is still attached to people with mental illness. This was also emphasised in *drugsfutures.* The potential futures of these drugs for mental health were not explored in any of the reports found in this review

Drugs and young people

Findings from this project and the previous Foresight Drugs Futures 2025 suggest (but do not prove) that awareness of drugs such as methylphenidate, usually under its trade name Ritalin, is relatively widespread amongst the general public. This awareness seems to result primarily from media debate about Attention Deficient Hyperactivity Disorder (ADHD), including the benefits and disadvantages of using drugs such as Ritalin to control the condition and the rise in the number of diagnoses of ADHD. We found no public engagement regarding the acceptability of this form of cognitive enhancement.

Public engagement work has been done on the use of recreational drugs by younger people. In line with our own work, previous findings include concern over their rising use, the effect of cannabis on the young mind, the growing strength of 'soft' drugs and the potential for them to act as a gateway to harder drugs.

Drugs and the law

Public engagement projects on the regulation and control of recreational drug use are limited. Perceptions of how the public views the current classification system appear to be based primarily on media opinion pieces rather than on larger studies of public opinion.

One report which builds in some public perception work is the 'Perspectives on Cannabis Conference 2002' report. The public engagement element of this event was limited to public attendance and a question and answer session allowing some interaction between 'experts' and the public. Other reports from previous and subsequent conferences in this series do not include any public involvement. The Q and A session found little objection from the public audience to a change in the regulation and control of drugs including the downgrading of cannabis, which at this time was still only a proposal. Concerns that were raised about any change in the law including the possibility of increased risk of progression to hard drugs, the potential health detriments including an increased use of tobacco, and the effect on younger people of any change.

Although these responses must be seen in the light of the probable audience attending the event, our consultation uncovered similar concerns. *drugsfutures* found the public to be in support of a public health approach to drug use and addiction, rather than one based on the criminal justice system. There was also widespread support for clarification of the

classification system, which is seen as confused and not based on the relative harms of individual drugs. There is little support for ending prohibition of currently illicit drugs. Prospective futures stemming from this report were discussed by a group of experts at a UK-Netherlands meeting on Brain Science, Addiction and Drugs but no public input was solicited.

Background

Science has long influenced the public, through fiction and non-fiction books, newspapers, radio and TV and the internet. The influence of the public on the science community, however, has always been more tenuous.

In the knowledge economy, research and development spur on innovation and economic growth, while demand for new goods and services drives innovation. This means that two-way communication between the public and the science community is vital. The growth of science as an industry, in which the 'material conditions of life are profoundly modified by the results of scientific investigation'[1] has influenced the interplay between science, politics and economics and made communication between these different fields all the more imperative.

An inquiry conducted by the Science and Technology Committee of the House of Commons in 2006 acknowledged the increasing role of scientific advice and risk management in developing policy across a broad spectrum of issues. The inquiry report states:

> *'Many of the most high profile policy issues are critically dependent on the input of scientists. These include: securing the economic development of the UK through the knowledge economy; protecting the population of the country against an avian influenza pandemic and other infectious diseases; mitigating and adapting to climate change; safeguarding the UK's energy supply; detecting and averting potential terrorist threats; and tackling obesity.'*[2]

Despite its vital importance, there is public distrust of science, and a degree of apathy towards it, as suggested by the falling numbers of students taking science subjects at A-level and beyond. This is at odds with what is seen as a key role for science in 21st century policy-making. Better public engagement may help bridge this gap.

This literature review documents relevant reports from both UK and international sources on public engagement in science, with specific reference to engagement in brain science, addiction and drugs. It begins by exploring the rationale and scope of evidence based policy in this area and the context of public engagement in sciences.

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[1] *A historical perspective on science engagement*, Wellcome Trust, June 2006, Boon T

[2] *Scientific advice, risk and evidence based policy making*, Science and Technology Committee, November 2006

In particular, the literature review includes

- a discussion on the definitions of 'brain sciences', 'evidence based policy' and 'cognition enhancers'
- an overview of public engagement in science policy and development, including the trigger factors for increased levels of public interest and the perceived benefits and challenges of engagement
- an overview of public engagement activities to do with the control and regulation of recreational drug use, medicines for mental health and cognition enhancers.

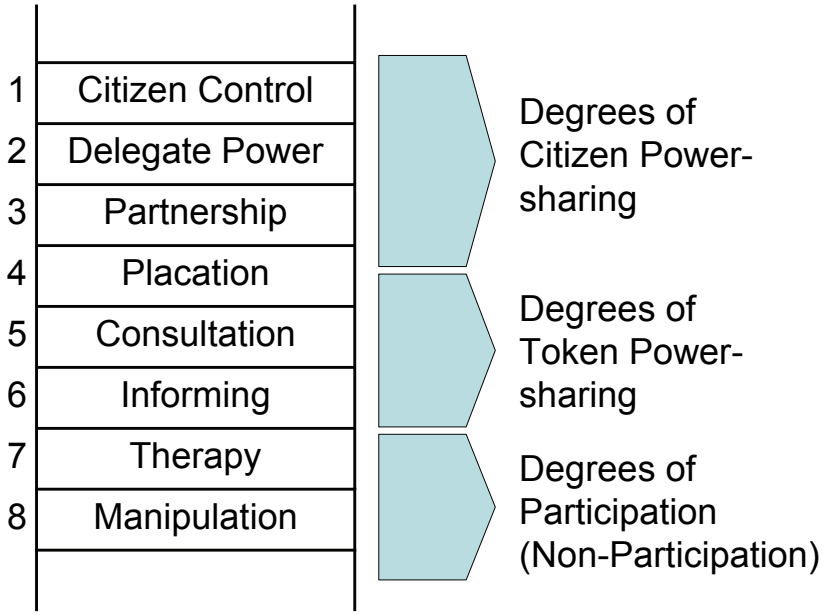
Definitions

Defining 'public engagement'

The literature review is concerned with getting a better understanding of the nature and the extent to which the public is engaged in debate and dialogue in policy development within the field of science. To this end, it is useful to offer a working definition of 'public engagement' and unpack the definition.

Arnstein's 'Ladder of participation' offers a helpful starting point. Mapping the different levels of engagement, the ladder shifts from the notion of being 'acted upon', at the lower rungs, to being 'acted with' at the higher rungs.

Arnstein's Ladder of Citizen Participation



Engagement can range from being informed, in which the public are recipients of information, to being given the responsibility of decision-making, which requires a more active role.

The 'knowledge deficit model' is a model of engagement that follows from the premise that the general public should be educated in order to understand better and consequently support the scientific community[3]. Within a 'public understanding of science' model, public engagement is seen as a means of increasing the public's awareness of scientific issues by providing education. It assumes to varying degrees that public antipathy to science, or to individual scientific or technological developments, is a function of lack of knowledge and that once knowledge is provided, support will grow.

This model has largely been overtaken by the view that those in the science community should seek to engage with members of the public and ensure that their values and concerns are reflected in policy development within science, moving towards the more consultative part of Arnstein's Ladder. This change of tone has been largely attributed to an increasing level of distrust on the part of the public towards science, which itself has been driven wholly or in part by crises such as BSE and MRSA and byenvironmental concerns, reflected and voiced in the national press. This has heightened the imperative for public engagement in the sciences.

The 'low information rationality model' rests on the premise that people absorb as little information they require to make a decision, and that where there is a lack of knowledge, people are likely to resort to cognitive shortcuts to reach a decision. On Arnstein's Ladder, this is described as 'token power sharing'.

What is 'evidence based policy'?

In *Better Policy Making,* published by the Centre for Management and Policy Studies, an evidence-based approach to policy is described as being to 'identify, co-ordinate, encourage and enable the best ways of making research evidence and other resources accessible in order to support better policy-making.'[4] In 2001 the National Audit Office defined evidence-based policy as including practitioner knowledge, experience overseas, pilots and commissioned qualitative and quantitative research studies.

The literature provides a sense that evidence-based policy has gained increased ascendancy in recent years. In the report 'Scientific advice, risk and evidence based policy making', the enhanced role of evidence based policy is attributed to a commitment by government to 'what works' and to a preference for a modernising agenda over ideologically-driven policy. The reduced role of ideology in determining the scope and content of policy development is reinforced by the work of Reid from the School of Policy Studies, Bristol University, who perceives an increased demand for 'objective and neutral analysis and feedback in terms of what is happening in relation to politics'[5].

[3] Messages and Heuristics: How Audiences form attitudes about emerging technologies, Scheufele, D

[4] Better Policy Making, Centre for Management and Policy Studies, 2001

[5] Evidence-based Policy: Where Is The Evidence For It?, Reid, F

Government publications have endorsed the use of evidence-based policy. In 1999 the Cabinet Office report, 'Professional Policy making for the twenty first century' highlighted the importance of '…effective use of evidence and the creation of sound conditions to promote evidence'[6].

However, despite the generally accepted benefits of entrenching evidence based policy, rather than continuing with the traditional approach of power-bargaining and negotiation, the literature raises some concerns about the way evidence is used in policy making processes. In a report[7] by the Centre for Crime and Justice Studies at King's College London, the author associates the increased prominence of evidence based policy making with New Labour, but notes that the Government's use of evidence based policy is questionable, and suggests that 'evidence informed policy' is closer to the truth. This distinction was explored by Professor Tim Hope of Keele University who stated that there is 'an incompatibility between the ideology of evidence-based policy and the natural inclination of the political process to want to secure the best outcomes.'[8] This approach leads to a greater reliance on the negotiating of outcomes than on deriving policy from a sound knowledge base. Rather than evidence-based policy making being free from ideology, this suggests that it has itself become an ideology.

The view that evidence-based policy is perhaps not as ubiquitous as the frequent use of the phrase would suggest is reiterated in a report[9] by the Science and Technology Select Committee which discusses the validity of claims that evidence informs decision making. This was particularly topical since, at the time of publishing the report, there was public unease about use by the government of the evidence on issues such as genetically modified foods, BSE and the environment. The report is based on three case studies focusing on scientific advice, risk and evidence in policy making with reference to MRI[10] safety, illicit drugs classification and ID card technologies. It finds that 'It would be more honest and accurate to acknowledge the fact that while evidence plays a key role in informing policy, decisions are ultimately based on a number of factors – including political expediency.', This suggests that the systematic and rigorous approach to policy development suggested by some other literature is only part of the story.

What is 'brain science'?

There are particular challenges in engaging the public with issues that are complex, uncertain and far reaching. In the case of brain science, the first problem is to define the

[6] Professional Policy making for the twenty first century, Strategic Policy making team, Cabinet Office, September 1999

[7] Ten years of criminal justice under Labour: An independent Audit, Solomon et al, KCL, January 2007

[8] Scientific Advice, Risk and Evidence Based Policy Making, House of Commons, Science and Technology Committee, 26 October 2006

[9] Seventh Reportof the Select Committee on Science and Technology, November 2006

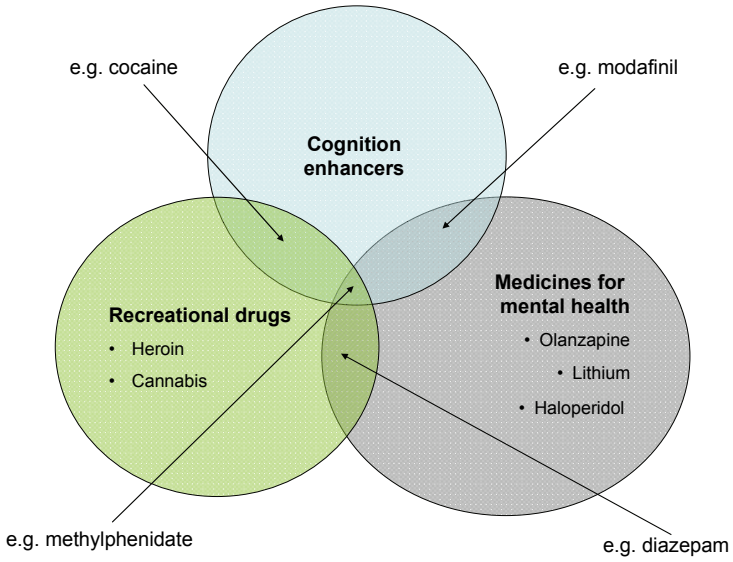
[10] Magnetic resonance imaging (MRI) is a non-invasive method used to render images of the inside of an object.

term itself. Brain science (or neuroscience) involves all the approaches to the mind and brain that are rooted in experiment science, including psychology and psychiatry, biochemistry, genetics, evolutionary studies, and others. Its scope has been expanding in recent years because of our fast-growing knowledge in areas such as the human genome, and because of advances in technology, especially scanning. Neuroscientists study both the healthy and the damaged brain. Bristol Neuroscience states: 'Understanding the brain, its complex functions in health and disease, and its interactions with our environment is one of the greatest intellectual challenges of our time'[11]. The 'Connecting brains and science'[12] report acknowledges the importance of this area and states that ultimately, the field of brain science can potentially 'modify the society and the vision of what it is to be human'[13].

Drugs

In this review we look at the three classes of drug which were the focus of the *drugsfutures* project : recreational drugs, cognition enhancers and medicines for mental health.

These drugs do not form distinct classes. The Venn diagram below illustrates the areas of overlap, which occurs to varying degrees between all three classes.



Recreational drugs

The class of 'recreational' drugs includes both illicit substances such as heroin and cannabis and licit substances, mainly alcohol and nicotine. The term 'recreational' may seem a misnomer, since many people use these drugs for purposes far removed from recreation. However, for the sake of clarity and to reflect common use, we have retained

[11] Online: http://www.bristol.ac.uk/neuroscience/news/notices/rcuk/#brainscience

[12] Connecting Brains and Science: the present and future of brain science - What is possible, what is desirable? Proceedings and synthesis report, Raeymaekers, P; Rondia, K; Slob, M, December 2004

[13] ibid

this term. The question of when a drug can be defined as 'recreational' may become even more complex if, as some reports covered in this review anticipate, cognition enhancers are used increasingly to make people better rather than making people well.

Some drugs which enhance cognition can be bought in supermarkets, such as sugar, coffee and chocolate, and are used recreationally. Others are illicit, such as cocaine. Some sit at the meeting point of the three classes, such as methylphenidate, the Venn diagram above shows.

There is also an overlap between medicines for mental health and recreational drugs. These include drugs whose purpose is to calm nervous and excitable states, such as temazepam and diazepam. These are also used recreationally to achieve these states.

Cognition enhancers

Cognition is the mental act that is required to reason, acquire knowledge, perceive and intuit[14]. A deficit of this ability, whether natural or caused by illness, injury, stress or tiredness, can in principle be remedied through cognition enhancers which stimulate mental processes.

Cognition enhancement can be defined as 'increased knowledge, understanding, activity of the brain including understanding things, comparing them and making them better'[15]. In two reports, 'Better Humans – stronger, longer, smarter, faster' and 'Cognition enhancers', it is noted that cognition enhancement goes beyond interventions that aid health. In the latter report, there is discussion of the changing application of the term from one that was associated with disease, such as dementia and schizophrenia, to its broader application where there is no impairment, but merely cognitive deficit. Cognition enhancers are sometimes known as 'smart drugs' because research suggests they have value not only in the treatment of some specific and identified conditions, but also to improve the cognitive performance of healthy volunteers. The use of 'smart drugs' that 'make us better rather than well' gives rise to social and ethical questions that public engagement in this area might well address.[16].

There is some overlap between cognition enhancers and medicines for mental health. Modafinil was originally developed as a treatment for narcolepsy but is now reported as being used off-prescription by college students and athletes in the US.

Medicines for mental health

This class of drug includes substances such as lithium compounds and haloperidol and also, as mentioned above, drugs such such as diazepam, which cross into the class of recreational drugs as well.

[14] Collins English Dictionary

[15] Drugs Futures 2025? Public perspectives

[16] Better Humans – Stronger, longer, smarter, faster

The policy context: the public demand for greater public involvement in scientific issues

In 2002, Sir Howard Newby suggested that 'the public now feels that it is reduced to the role of a hapless bystander or, at best, the recipient of scientific advance and technological innovation which the scientific community believes it ought to want.'[17] A survey undertaken in 2005 by the (then) Office of Science and Technology found that a majority of the UK public stated that they knew nothing or not very much about public consultation in science, though 81 per cent suggested that the public should be consulted on decision about scientific developments[18]. A market research project, undertaken by the Royal Society following a request from the Science in Society Committee, found that 62 per cent of members of the general public were 'very interested' or 'quite interested' in science, with this proportion increasing to 70 per cent amongst informants aged 35-64 and 72 per cent of those in the ABC1 socio-economic groups.[19] Similarly, the vast majority (91 per cent) believed that the views of the general public should be taken into account where scientific developments impact on society despite 83 per cent suggesting that they did not have the scientific knowledge to debate the use of science. So, whilst there is enthusiam and interest amongst the public for having a voice in the direction of future science and technology, many feel they lack the knowledge.

There are some concerns that a lack of understanding of public sentiment by the science and science policy community may lead to further public confusion regarding the motives behind technological developments. For instance, a report published by the Parliamentary Office of Science and Technology entitled 'Public dialogue on science and technology' suggests that public concerns are misrepresented in the media and do not take account of broader psychological, social, cultural and institutional factors that shape public attitudes to scientific advances and technological developments. However, the report asserts that the public are often not opposed to these scientific developments and are more likely to be ambivalent and to welcome information from a range of sources, weighing the risk and benefits in a sophisticated manner. It is not necessary to hold scientific knowledge in order to have a view on scientific matters.

[17] The Public Value of Science: Or how to ensure that Science really matters, Demos, 2005 http://www.demos.co.uk/files/publicvalueofscience.pdf

[18] Debating Science, Parliamentary Office of Science and Technology, March 2006. http://www.parliament.uk/documents/upload/postpn260.pdf#search= per cent22royal per cent20society per cent20upstream per cent20engagement per cent22

[19] Social grade (SG) is a classification system used by much social research in the UK. It classifies households according to the occupation of the chief income earner, as below:
AB Higher and intermediate managerial/administrative/professional
C1 Supervisory, clerical, junior managerial/administrative/professional
C2 Skilled manual workers
D Semi-skilled and unskilled manual workers
E On state benefit, unemployed

The response from the policy making community

The response from government and the wider science and policy community to the increasingly important role of science, and to the growing recognition that successful policymaking is more assured if public views help to inform its direction, has been to encourage greater engagement with the public, with a greater focus on information, dialogue and participation. This marks a shift from the science community's previous approach to discussion with the general public, which was more intended to avert the 'perceived crises of trust'[20].

Since the publication of the Bodmer Report, 'The public understanding of science', in 1985, there has been an increasing push on the part of the science community to discuss science and science policy, with growing regard to its social implications. One reason was that Bodmer reflected that lack of engagement with people outside of the science community may have served to reduce funding for science research[21]. The most notable response to this report was the setting up of the Committee on the Public Understanding of Science and the initiatives that came after, the good practice from which is summarised in the report 'Reaching Out' (2000)[22].

Further intiatives were undertaken by the Royal Society, which is increasingly active in science engagement. See for example their reports on science and the social implications of scientific and technological implications including 'Science, policy and risk' (1987), 'Science, technology and social responsibility' (1999), and 'Science, technology in the eye of the law' (2000).

This form of engagement sought to inform rather than engage the public and was reliant on what we referred to earlier as the knowledge deficit model. It served to raise the level of debate. But it was not a sufficient response to science-related crises such as BSE and the strong public reaction to genetically modified foods. The report, 'Policy for dialogue: informing policies based on science and technology', identifies February 2000 as the 'watershed moment', suggesting that there was a perceived mood for change at this time.

Similarly, the report, 'The role of media in public engagement', bucks the commonly held perception that the public are passive recipients of information. The report examines the role of the media in communicating science to the general public. It finds that the media are more likely to reinforce existing ideas than to form or change people's perceptions, and that the media will reflect a topical or 'cultural anxiety perspective' as much as they create it.

[20] See through Science, Demos

[21] Boon, T, A historical perspective on science engagement, Wellcome Trust, June 2006

[22] COPUS, Reaching Out : organising public events; a collection of case studies from the COPUS grants scheme, 2000

A report produced by Demos entitled 'See through Science – why public engagement needs to move upstream'[23], suggested that there was still need for improvement in real engagement between the science community and the general public. The report suggests, 'Processes of engagement tend to be restricted to particular questions, posed at particular stages in the cycle of research, development and exploitation'[24]. This concern is mirrored outside the science community. In a report on public participation and climate change adaptation, the authors note that public participation in the social sciences was mostly grounded in education and information, rather than in engaging the public to determine the agenda. This was deemed to fall short of full participation, which should 'imply a degree of active involvement in taking decisions'[25]. The authors note that the danger of restrictive forms of participation is that they often reinforce existing power dynamics and maintain hierarchies of decision-making. Indeed, 'Many authors have shown how these limited forms of inclusion are embedded within and further enforce persistent, pre-existing relations of social power between agencies and the public, and in the final outcome may do little to weaken top-down styles of decision-making'[26].

Consequently, there has been a move towards engaging the public at an earlier point in the policy cycle, before decisions have been taken, with the aim of 'improving the social sensitivity of innovation processes at the design stage'[27]. This ensures that the public are able to influence the debate and the direction of travel of science policy, rather than simply rubber-stamping – or refusing to rubber-stamp – decisions that have already been taken. This trend seeks to broaden the agenda beyond discussions of risk and towards a greater focus on the vision underpinning science and technology research.

The literature unpacks the different exercises and methods that fall within engagement and the traditional interpretation of participation. It recognises the deficits of the less participatory aspects of engagement and appears to reach a consensus that two-way participation places an onus on decision makers to inform members of the public but also, importantly, to be informed of public perceptions and interests. The paper entitled 'Policy through dialogue: informing policies based on science and technology' concludes, 'The purpose of dialogue is not to determine but to inform policy. It does this by challenging the thinking of policymakers and scientists who contribute to policy making, as well as that of the public stakeholders and special interest groups'. The report issues strong guidance on establishing reasonable expectations for engagement with members of the public. A failure to communicate the outcomes from engagement can result in increased levels of distrust. These messages were fully incoporated into the planning of the *drugsfutures* project.

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[23] See through science – why public engagement needs to move upstream, Demos, 2004 http://www.demos.co.uk/files/Seethroughsciencefinal.pdf

[24] Pg 13, ibid

[25] Public Participation and Climate Change Adaptation

[26] ibid

[27] ibid

Engagement activities

The initial motivation for engaging the public on scientific matters was the assumption that the public needed to be informed and educated.

'See through science: Why public engagement needs to move upstream'[28] suggested that effective engagement has a clear purpose and is underpinned by substantive processes that aim to ensure better social outcomes through improved decision making processes. This includes allowing the public to frame the debate and set the agenda.

An inquiry held by the House of Commons Select Committee on Public Administration found that methods of public consultation were increasingly taking different forms, outside traditional methods such as questionnaires, opinion polls and invitations for submissions, and was moving towards dialogue. Initiatives such as the previously mentioned Committee on the Public Understanding of Science (COPUS) sought to play a role in providing knowledge to the general public.

In discussing methods of engagement in the sciences, a report entitled 'Open Channels'[29] identifies two prominent characteristics: deliberation and inclusion. It defines deliberation as a process that 'involves careful consideration of information and views… participants can reflect on their views and re-evaluate their positions on an issue as the dialogue progresses'[30].The report identifies face to face meetings, visual aids and text as means of deliberation. It defines inclusion as 'participation by individuals and groups from a broad and diverse range of perspectives', with an explicit intention to open consultation to members of the community who do not always participate in engagement. The report identifies women, people from ethnic minorities, young and old people and people with disabilities as groups that are considered excluded and which the dialogue processes seek to incorporate. The report provides the following list of 'innovative methods of public dialogue':

- deliberative polling
- standing panels
- focus groups
- citizens juries/panels
- consensus conferences
- stakeholder dialogues
- internet dialogues[31]

[28] ibid

[29] Open Channels, Public Dialogue in science and technology, Parliamentary Office of Science and Technology, March 2001

[30] ibid

[31] Open Channels: Public Dialogue in science and technology, 2001, Parliamentary Office of Science and Technology.

International response

International bodies such as the United Nations and the European Union have sought to encourage and demonstrate engagement of the public in decision-making. The United Nations Conference on Environment and Development, held in 1992, elicited a commitment from signatories to encourage public participation in decision-making. Similarly, the UN's Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters places a requirement on signatories to introduce procedures to support public decision-making.

The Environmental Assessment Directive encourages greater levels of public participation in EU decision-making, whilst the White Paper on European Governance[32] places an onus on governments, elected assemblies and national, regional and local courts to support participatory and transparent democracy[33].

National response

The report published by the Council for Science and Technology, 'Policy through dialogue: informing policies based in science and technology', sets out a framework for effective dialogue between the public and the science community. It has five parts:

- Early identification of emerging issues where an investment in public dialogue is likely to bring significant benefit
- Buy-in by the relevant minister to a process of dialogue on that issue together with a clear statement of purpose, and commitment to a reasoned explanation of the way in which dialogue has informed any resultant policy.
- Identifying a structure of governance that is appropriate to the issue
- Allocating appropriate resources
- Learning from the experience of successive dialogue processes and thereby improving them

There are many examples of engagement activities undertaken by UK government departments. The former Department of the Environment, Transport and the Regions established a Chemicals stakeholder Forum to discuss chemicals policy with regard to risk and regulation. The Department of Health and the former Ministry of Agriculture, Fisheries and Food explored participatory dialogue processes to tackle concerns about food safety[34].

Dialogue with the public also sits within the remit of the Food Standards Agency, the Agriculture and Environment Biotechnology Commission and the Human Genetics

[32] http://eur-lex.europa.eu/LexUriServ/site/en/com/2001/com2001_0428en01.pdf

[33] Open Channels: Public Dialogue in science and technology, 2001, Parliamentary office of science and technology

[34] Open Channels: Public Dialogue in science and technology, 2001, Parliamentary Office of Science and Technology

Commission. The Human Genetics Commission is obligated to 'actively seek input from the public and other stakeholders'[35] and meets in public.

Public engagement activities are also carried out outside central government. A selection is discussed here but participatory activities are explored in more detail later in the review.

The GM Nation debate invited members of the public to take part in a deliberative debate on issues relating to GM products and was led by an independent steering group, set up by the government. The aims and objectives for this activity included: Allowing the public to frame the debate, encouraging participation from people at grass roots level, using creative and innovative means for deliberative events, providing opportunity to access information and evidence, and channelling the views of the public to government[36]. However, the GM Nation debate is now regarded as an example of 'downstreaming', with engagement taking place too late in the innovation cycle to be effective[37].

In 2005, Foresight project on Brain Science, Addiction and Drugs in conjunction with OPM using deliberative consultation involving members of the public, interest groups, scientists and policy makers to discuss their attitudes towards psychoactive substances. The findings were published in 'Drugs Futures 2025?' It found that participants were keen to be involved in discussions on the policy development of new technologies, and that the general public exhibited enthusiasm and a willingness to explore social and ethical issues. The consultation sought to inform future exercises on effective engagement with the public. It found that while participants suggested that they could access information from a broad spectrum of media, including TV, the internet, newspapers, the radio, and mailing campaigns, there was a desire to engage in dialogue in workshops, schools and easy to access venues such as community sites.

An attempt to engage the public at an earlier and more relevant stage is seen in the case of nanotechnology. The Nanotechnology Engagement Group proposes a coherent programme of public dialogue. It wishes to use upstream engagement and to transfer learning to science and technology issues[38].

Benefits of engagement

'Science in Society' undertook an analysis of projects undertaken by Committee on Public Understanding of Science, under the auspices of the Royal Society. They estimated that approximately 1.5 million people have engaged in science communication activities

[35] ibid

[36] http://www.gmnation.org.uk/

[37] Debating Science, Parliamentary Office of Science and Technology, March 2006. http://www.parliament.uk/documents/upload/postpn260.pdf#search=%22royal%20society%20upstream%20engagement%22

[38] Ibid

between 1999 and 2002[39]. In a discussion of the benefits that have accrued following dialogue, the report, 'Policy through dialogue: informing policies based on science and technology', points to two significant effects. One is a greater likelihood of public acceptance of policy decisions, coupled with a new approach to policy-making. Ultimately, this will result in 'a greater trust in the processes of science based decision-making, which in turn may diffuse some of the tensions and suspicions surrounding individual issues'[40]. The report argues that engagement may reduce the polarisation of viewpoints that leads to an 'unresolved legacy' in the shape of a longstanding and unresolved contentious issue. Dialogue with the general public is a mechanism to tease out the differences, debate, and gauge the public temperature for scientific issues as issues emerge. The report also highlights dialogue as a means of 'informing the research agenda and address[ing] public concerns'[41].

The report by the European Commission conveys the benefits of engagement and dialogue in similar terms. In discussing dialogue between the science community, politicians and the general public, the Commission states: 'far from being intended to replace the democratic debate in its traditional, recognised forms, still less the political decision-making process, initiatives of this type are designed to help this debate unfold and to aid decision-making'[42].

Challenges and risks in consultation

The literature identifies three overarching challenges to public engagement in science, and brain science specifically.

- Uncertainty of the definitions
- National context
- Establishing expectations

What is brain science?

As was discussed above, the literature acknowledges that there are a number of interpretations of the term brain science, which may present some difficulties in engaging with this issue. A workshop in Amsterdam was held to provide an overview of the state of play in brain science and discuss the social and ethical implications in this field. In the report[43] documenting the outcome of the workshop, there was discussion of the difficulties

[39] Science in Society, 2004, Royal Society

[40] Policy through dialogue: informing policies based on science and technology, March 2005, Council of Science and technology

[41] Policy through dialogue: informing policies based on science and technology, March 2005, Council of Science and technology

[42] Science, Society and the Citizen in Europe, November 2000, Commission of the European Communities

[43] Connecting brains and sciences: the present and future of brain science – what is possible, what is desirable? Proceedings and synthesis report

presented in engaging the public with this subject matter. The discussion groups at the meeting were mapped onto the technical and social implications of brain science, rather than exploring the subject in its totality. This approach was regarded by some attendees as contradictory, given that the subject seeks to explore the links and interdependencies between brain and human sciences. To counter this risk our definitions of 'Brain Science', 'Cognition enhancement', 'Drugs' and other terms were refined and outlined through this literature review.

'Scaling up'[44]

This deliberative workshop was an attempt to form a European-scale approach to brain sciences, in keeping with the increased level of political debate and policy development between nation states, and with the globalisation of research. This activity demonstrates the increasing 'scaling up' of engagement in scientific issues, a term which represents the move away from engagement at a localised to a national level and beyond. The report published by the Parliamentary Office of Science and Technology entitled 'Public Dialogue on Science and Technology' suggests that there is a challenge in engaging members of the public on issues that are of national importance and scope, as it is difficult to focus discussion when the subject matter is so all-encompassing.

Hijacking by interest groups

There is the danger that interest groups may hijack a subject, colouring the nature of the debate so that it is less about galvanising interest and entering dialogue with the general public than about pursuing an agenda and possibly disseminating misinformation. The 'Open Channels' report[45] stated that to overcome this, anyone organising an engagement activity should avoid the 'usual suspects' which include official bodies, special interest groups and industry lobbies, which usually have their own agenda. We adopted an invitational approach in *drugsfutures* which, as recommended in the Open Channels report, sought to engage with those who are representative of the wider British public.

Evaluation of engagement

'Open Channels' sets out broad criteria by which to measure the success of engagement. They seek to measure the effectiveness of the processes of consultation and their impact. In summary, the report suggests consultation should:

- be clear about its objectives and decision-making processes
- be representative and inclusive, particularly of excluded groups
- demonstrate openness, independence and transparency
- accommodate timescales for decision-making
- be deliberative, allowing participants to reflect on information and evidence

[44] Public dialogue on science and technology

[45] Open Channels: Public Dialogue in science and technology, 2001, Parliamentary Office of Science and Technology

- be adequately supported, with funds available[46]

Public engagement – drug and theme specific findings

To further inform the project a literature search was undertaken to locate previous research reports that covered comparable areas. In order to catalogue the research which was identified, the four themes and three drug types were mapped onto a matrix and literature was identified that covered as many areas of this matrix as possible.

Using this method, the key gaps in existing knowledge can be identified and focused on throughout the research. The literature identified is briefly summarised, and the key findings are outlined, below.

Control and regulation

The control and regulation of recreational drugs

Under the Misuse of Drugs Act 1971[47] drugs are classified A, B or C depending on the degree of harm they are considered to cause when misused. Penalties laid down in the criminal justice system are related to the class of the drug. Heroin, morphine, methadone, cocaine, ecstasy and LSD are in class A, which is reserved for the most harmful drugs, while since January 2004 cannabis has been in class C. This reclassification means that some of the penalties relating to cannabis have been reduced although the supply and possession of cannabis remain illegal.

The public debate concerning decriminalisation of cannabis provides us with a body of evidence regarding public views and how they are sought regarding the control and regulation of recreational drugs.

The subject of drugs makes a good journalistic article, reflecting the interest the public have in this issue. There are many articles that capture some element of public opinion[48] [49] [50] and although newspapers may be viewed as biased they do offer insight into public perception of the regulation and control of recreational drugs. What the press can tell us on this issue is that there are many schools of thought, ranging from complete legalisation and

[46] Open Channels: Public Dialogue in science and technology, 2001, Parliamentary Office of Science and Technology

[47] Online: http://www.parliament.uk/commons/lib/research/rp2000/rp00-074.pdf

[48] Johnston P, 'Public relaxed on the use of cannabis', Daily Telegraph, August 2006, Online: http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2006/08/14/ndrugs14.xml

[49]Sikora K, 'If the government were to reclassify drugs, should alcohol and tobacco be included?' , Observer, August 2006, Online:http://observer.guardian.co.uk/comment/story/0,,1838192,00.html

[50] Travis A, 'How are drugs classified?', The Guardian, June 2006, Online: http://www.guardian.co.uk/drugs/Story/0,,1796315,00.html

a focus on the treatment of addiction as a disease to an even stricter punitive system. Example headlines range from 'Cannabis 'could kill 30,000 a year'[51] to 'Downgrade ecstasy, drug expert tells MPs'[52]. When we consider public engagement, this suggests that public opinions may reflect some of the sensationalist approach in evidence in these articles.

In terms of control and regulation, journalists, MPs, policy analysts and social researchers have predominantly focused on the effects of legislation on recreational drug use. See for example the international examples 'Alternative Systems of Cannabis Control in New Zealand'[53], 'Marijuana: Early Experiences with Four States' Laws That Allow Use for Medical Purposes (US)'[54] and more importantly for the UK 'The report of the independent inquiry into the misuse of drugs act 1971'[55] which was conducted by Baroness Runciman in 1999. It reassessed the current classification system outlined above but did not result in immediate legislative change. These papers, whilst interesting, do not build public opinion into their findings in any comprehensive way.

Academics, policy analysts and researchers have tried to understand public perception of the various methods of regulation. One report that pursued public views was that of the Cannabis Conference 2002[56] which includes a report on a question and answer session between drug policy setters such as managers of Drug Action Teams, police representatives and NHS executives and representatives from cannabis campaigns and members of the public. Public views showed that there was little objection from the audience to a change in the regulation and control of cannabis. But fears voiced included:

- the effect that any change would have on the use of tobacco;
- lack of real ideas of how a change could be manifested;
- an increased risk of progression to hard drugs;
- potential effect on school work; and
- potential effect on organised crime.

Maag[57] provides us with an international view of this issue using a global comparative approach in which he looks at public attitudes to the control of recreational drugs and the extent to which these are based on scientific evidence. Maag's methodology was a review of literature based on primary evidence conducted in Italy, Switzerland, Holland and the

[51] Online: http://www.guardian.co.uk/uk_news/story/0,3604,947688,00.html

[52] Online: http://www.guardian.co.uk/drugs/Story/0,,1954762,00.html

[53] Online: http://www.ukcia.org/research/nz-can.htm

[54] Online: http://www.gao.gov/new.items/d03189.pdf

[55] Online: http://www.druglibrary.org/schaffer/Library/studies/runciman/default.htm

[56] Buffry A, 'Cannabis Conference: Shaping A New Agenda Review', Feb 2002, Online: http://www.lca-uk.org/displayitem.php?articleid=615

[57] Maag V. 'Decriminalisation of cannabis use in Switzerland from an international perspective' International Journal of Drug Policy: June, 14(3), 2003, p.279-281.

US. He found that public attitudes to recreational drug control are shaped most by preconceived notions about the acceptance or tolerance of the use of narcotics. The paper understandably calls for more empirical evidence of public views on this matter and for their use to inform rational drugs policy.

The control and regulation of mental health drugs

The Medicines and Healthcare Products Regulatory Agency (MHPRA) (previously the Medicines Control Agency) has the stated aim of safeguarding public health by ensuring that medicines for human use, sold or supplied in the UK, are of an acceptable standard of safety, quality and efficacy; ensuring that medical devices meet appropriate standards of safety, quality and performance; and promoting the safe use of medicines and devices. This remit includes the regulation and control of mental health drugs.

The MHPRA provides the secretariat for the Committee for the Safety of Medicines (CSM) which gives advice to the Licensing Authority on whether new mental health drugs submitted to the MHPRA should be granted a marketing authorisation. It also conducts periodic reviews of the licensed status of specific drugs, and uses reports of adverse effects to inform its decisions.

The MHPRA conducts consultation which is open to, but not actively promoted to, the public. It does not routinely engage with the public on regulation outside this consultation but there is some indication that this may change in the future. The MHPRA annual report[58] talks about engagement and states:

'We have recently initiated research into public and professional perspectives on risk-benefit and regulation in medicines and devices which will feed into policy development'

This public engagement approach to regulation has gained some credence internationally, especially in North America. In Canada public consultation on the regulation of drugs takes place more routinely. In 1998-99, Health Canada (the federal department responsible for helping Canadians maintain and improve their health) hosted a nationwide series of public consultations to address proposed changes to federal health protection legislation, and invited patients groups and other members of the public to voice their opinions. One of these voluntary groups[59] defined good public engagement on the regulation of drugs as being based on the following principles:

- All citizens support science through their tax dollars and experience the profound consequences of science – both good and bad.
- In a democracy, those who experience the consequences of an activity and those who pay for it ordinarily expect a voice in decisions.

[58] Online: http://www.mhra.gov.uk/home/idcplg?IdcService=SS_GET_PAGE&useSecondary=true&ssDocName=CON2025135&ssTargetNodeId=382

[59] Mains B, 'Strategies for Public Consultation and Citizen Access at the Therapeutic Product Programme', Working group on women and health protection, August 2000, Online: http://whp-apsf.ca/en/documents/pub-consult.html

- Scientific leaders have no monopoly on expertise, nor do they have a privileged ethical standpoint for evaluating the social consequences of science and of science policies.
- Non-scientists already contribute to science and science policy (e.g., women's organisations have redirected medical research agendas to reduce gender biases).
- Elite-only approaches are antithetical to the open, vigorous and creative public debate on which democracy, policy-making and science all thrive.
- There is a danger that public support for science will erode if other perspectives are excluded.

Another approach to public involvement in drug regulation decision making is taken in the US, where 'Citizen Advocates' are trained to sit on drug regulation review panels. In this model, constituent organisations are invited to nominate two advocates each, who are asked to provide a description of their activities and a curriculum vitae. Applicants are scored on their education, knowledge and interest in the area of medical science being appraised and on their ability to communicate in the peer-review environment. Top candidates are selected, with attention paid to representing the whole of the US geographically, to race and ethnicity, and to the mix of rural and urban populations. Advocates who are scientists are not excluded from participation on peer review panels, but they are placed on panels unrelated to their field of expertise.

Each peer review panel has two advocates, so that they represent about 10 per cent of each panel. At the meetings, advocates are deliberately placed in the centre on each side of the table, where they cannot readily be overlooked.

Whilst this approach is not pure public involvement in the regulation of drugs, most drugs also go to an Advisory Committee before a final decision is made about them. These committees meet in public and before they begin their deliberations there is time set aside for anybody who wants to make a presentation. All documentation provided to committee members must also be made available to members of the public who want to make presentations to the committee. The US also accepts citizen petitions asking for drugs to be removed from the market or for safety warnings to be tightened.

The control and regulation of cognition enhancers

As we saw in our Venn diagram of drugs, many cognition enhancers are both treatments for mental health problems and recreational drugs. So research in these areas is often relevant to cognition enhancement. For example the MHPRA conducts consultations into the regulation and control of cognition enhancers and the government, the public and social researchers are all interested in the regulation and control of cognition enhancers such as cocaine.

Specific research on the control and regulation of cognition enhancers as a separate class of drug is less available than research looking at them from these other angles.

One research report that does address the regulation of these drugs Is 'Cognitive Enhancement: Methods, Ethics, Regulatory Challenges' by Bostrom and Sandberg[60]. They found that this class of drugs currently faces specific regulatory problems and feel that these regulations are impeding advances in their development.

Public attitudes toward drug use

Public attitudes toward recreational drug use

The annual British Crime Survey (BCS) in 2003/04 found that that a third of people aged 16-59 in England and Wales have used illicit drugs at some point in their lives. Twelve per cent had used drugs in the past year and 7.5 per cent in the past month. That equates to 11 million people having used illicit drugs in their lifetime, and just under four million using them in the past year. Cannabis, the survey suggests, is the most popular recreational illicit drug used. The BCS is felt to be the most accurate reflection of the levels of drug use in the UK, and uses a sample size of 20,000 people.

Levels of drug use as measured through the BCS have been increasing year on year but the Home Office perceives that they have now levelled out[61]. Increases are particularly pronounced in the use of ecstasy and cocaine. The BBC has reported cocaine use rising sharply in the past nine years, albeit from a low base. Latest figures show that 2.4 per cent of 16-59-year-olds in England and Wales had used cocaine in the past 12 months – up from 0.6 per cent in 1996[62] - and a United Nations report revealed that in Britain 2.2 per cent of the population aged 16 to 59 have taken ecstasy, compared with 1.2 per cent five years ago[63].

Possibly as a result of these trends a good deal of research has been undertaken into the social effects of this drug use. Much of the focus of this research, however, is on the links between recreational drugs and crime, social exclusion and mental health problems. Only a relatively small volume of work has been undertaken on the social acceptability of recreational drug use.

While many studies that report increasing drug use cite its rising social acceptability, few investigate the reality of this assertion or quote studies that back up this claim.

One study[64] looked at the public perception of drug use in a small area and was conducted by Cambridgeshire Constabulary. It was intended to help the police understand the impacts of substance misuse and how their efforts should be focused to meet the public interest.

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[60] Bostrom and Sandberg, 'Cognitive Enhancement: Methods, Ethics, Regulatory Challenges',Oxford University, 2006, Online: http://www.nickbostrom.com/cognitive.pdf

[61] Online: http://www.homeoffice.gov.uk/rds/pdfs2/r182.pdf

[62] Online: http://news.bbc.co.uk/1/hi/magazine/4318898.stm

[63] Online: http://observer.guardian.co.uk/drugs/story/0,,1051380,00.html

[64] Online: http://www.cambsdaat.org/audit/findings_availability_2004.pdf

The purpose of engagement such as this is to give the public the feeling that the police are taking the problems that are important to them seriously.

A survey conducted in Austria found that 63 per cent of students and 40–45 per cent of adults are opposed to punishment for cannabis use by persons over 18. In Vienna, 78 per cent of people surveyed expressed the opinion that cannabis should be prohibited but favoured decriminalisation for drug addicts. 86 per cent of people felt that drug addicts should receive therapy rather than punishment. Another survey, conducted in Spain in 2002 by the Centro de Investigaciones Sociológicas, found that drugs and alcohol are perceived as an important social problem, behind unemployment and terrorism, but ahead of delinquency and civic insecurity.

Prospective futures in this area were discussed at the recent UK-Netherlands meeting on Brain Science, Addiction and Drugs[65]. Speakers at this event felt that over the next 20 years we could see public attitudes either becoming much more tolerant of drug abuse or much less so, with a greater willingness to curb the freedoms of those using illegal drugs as a way of reducing their adverse impact on society in the second of these scenarios.

The lesson from these studies appears to be that opinion varies greatly between different stakeholders. In addition, public perception of recreational drug use in the UK is under-researched and is a rich area for public debate.

Public attitudes to the use of drugs to treat mental health

As a comparison with levels of recreational drug use, it is estimated that at any point in time, one in 25 people in the UK is using antidepressants[66]. Although antidepressants are only one class of drug in the universe of treatments for mental health, and are only used in situations that could be construed to be 'mild' versions of mental health problems, this still represents almost 2.5 million people. This level of licit drug use shows that the use of drugs to alter mental well-being is widespread and widely accepted in the UK.

The bulk of the research into the public's attitude toward drug treatment in mental health can be divided into two categories:

- Research conducted with members of the public with mental health problems, into the drug treatments they receive;
- Research conducted with people free from diagnosed mental health problems, into the stigma attached to mental health drug treatment.

While research in the first of these is relatively common, research into the second is not.

People with mental health problems are well placed to inform service providers on how to improve their service delivery, including the treatments they receive, and it is a myth that

[65] Online: http://www.fco.gov.uk/Files/kfile/Report_BSAD_Event%5B1%5D.doc

[66] Gunnell D, 'The risks and benefits of taking antidepressants', University of Bristol, December 2004 Online: http://www.bris.ac.uk/researchreview/2004/1113991805

they are unable or unwilling to do so[67]. One organisation undertaking research into how best to achieve consultation with mental health service users is the Sainsbury Centre for Mental Health. It funds and conducts service-user engagement with people using mental health services. It does not deal solely with drug treatment, but rather adopts a whole service approach and uses engagement techniques relevant to the *drugsfutures* project. An approach called User Focused Monitoring (UFM) was developed by the Centre in 1997 to achieve effective engagement with people with mental health problems[68].

An innovative aspect of this initiative is that it utilises service user interviewers, who take on the role of facilitator in the group discussions held to seek views. This helps participants to relax and speak, knowing that they are talking to someone able to empathise with their situation. This could be useful when considering discussions of mental health treatments. The report produced from the pilot UFM project showed that people with mental health problems were able to evaluate the treatments they receive and make both criticisms and suggestions for improvement. It found that recruitment for engagement events with service users should not assume that advocacy organisations are the only voices of service users and instead should allow open and fair recruitment to the process. It was also found that recruitment through ad-hoc routes, which are often used in public engagement, can result in unsuitable representation by attracting the 'usual suspects,' as outlined in our earlier section on risks. In terms of the engagement itself, it was recommended that researchers pair service users in any group setting, as the support they give one another will improve the outcome. It was also found to be important to schedule time in to the process to allow those involved to compare notes outside the formal meetings. Learning from this guide for the *DrugFutures,* project, we ensured that people who experienced mental health problems were involved in our research, that they were accommodated for and engaged in familiar surroundings, that the option of being 'paired' when attending the larger public events was available and that recruitment was made through outreach groups rather than advertisements.

Research conducted with people free from diagnosed mental health problems into the stigma attached to mental health drug treatment is relatively unavailable. As with the public's perception of recreational drug use, this is the subject of journalistic speculation,[69] but little rigorous UK research can be found.

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[67] Faulkner, A. and Layzell, S., 'Strategies for Living: The Research Report', Mental Health Foundation, March 2000, Online: http://www.mentalhealth.org.uk/page.cfm?pagecode=PBBRMHS4

[68] Wallcraft, J., 'On our own terms', The Sainsbury Centre For Mental Health, 2003, Online: http://www.scmh.org.uk/80256FBD004F3555/vWeb/flPCHN6FTF5G/$file/on+our+own+terms.pdf

[69] Mustapha A, 'Bad medicine', Society Guardian, April 2006, Online: http://www.guardian.co.uk/comment/story/0,,1758416,00.html

A report of research[70] conducted in the US on support for mental health treatment on Medicare (Free or subsidised healthcare available to those living at or below the poverty line in the US, and other select groups) was prepared by the American Psychiatric Association and reviewed literature on the subject over five years (1989 – 1994). The report highlights the fact that little public opinion has been built into the policies developed in the US. Methodologically this report found that the public are able to participate in research into mental health treatments but that all research should be conducted with sensitivity to terminology and jargon. Question wording could be refined, states the report, through split samples using alternative wordings. This will allow sensitive wording to be identified for future research. The report also stated that because respondents are often not familiar with the subject matter, they are highly suggestible as to what their responses 'should be.' Again, these findings were built into our approach. The scenarios we used were read aloud by all facilitators and small 'break-out' groups were used to ensure that those less willing to speak out were heard and were encouraged to be open and honest.

Public attitudes to cognition enhancers

As was mentioned earlier, the public perception of cognition enhancement is the major area of the matrix where research is lacking. Most existing research has focused on the ethical implications of the development and use of cognitive enhancers from the 'expert' perspective, with no public input.

The ENHANCE project[71], a program of research and review being undertaken by the Centre for Ethics in Medicine at Bristol University, Oxford Uehiro Centre for Practical Ethics, the Future of Humanity Institute, Stockholm Bioethics Centre and Vita-Salute San Raffaele University in Italy, said that much of the discussion to date of the ethical aspects of cognitive enhancement technologies has focused on five broad areas:

- Interventions that affect the next generation, e.g. embryo selection and genetic engineering.
- The social effects of widespread use of enhancement, particularly the concern that social inequality might be exacerbated if technologically-mediated cognitive enhancements were added to the existing advantages of the wealthy and socially privileged such as private schooling etc.
- Whether the use of cognition enhancement would constitute a form of 'cheating'.
- The appropriateness of using drugs to control behaviour in minors, especially Ritalin and other ADHD medications.
- Instrumentalisation of the human being and of human relations, including the concern that medicalising conditions within the normal human range may reflect a lack of respect for human dignity or a distorted view of the human good.

[70] Hanson K, 'Public Opinion and the Mental Health Parity Debate: Lessons From the Survey Literature', American Psychiatric Association, 1998, Online: http://www.psychservices.psychiatryonline.org/cgi/content/full/49/8/1059

[71] Online: http://www.enhanceproject.org/resources.html

Demos collected together a series of essays on this subject[72] but these were again largely based on expert opinion rather than public engagement. Bostrom and Sandberg (2006) assert that 'There is a wider cultural challenge in destigmatising the use of enhancers. At present, the taking of medicine is regarded as a regrettable condition and use of non-treatment medication is seen as suspect, possibly misuse.' They go on to argue that public perception is shifting and cite the rising acceptance of purely cosmetic plastic surgery as a treatment of a 'non-medical' condition.

Young people's and parents' views

Young people's and parents' views on recreational drug use

Three groups of people are of interest to us here in terms of engagement:

- Parents of children who use drugs or are potential drug users
- Young people who use drugs or are potential drug users
- Drug users who are parents

The importance of engaging with the first group is stressed in a UNESCO-developed tool for engaging parents in developing school drug programs[73]. These programs are intended to involve parents in decreasing drug use. The role of the parent is felt to be a crucial positive intervention that can help to avoid the more critical interventions offered by the education system, the police or drug and alcohol teams. This paper highlights the importance and benefits of parental engagement.

Methods of engagement with both this parental group and younger drug users are addressed in a Home Office report which outlines in detail a good-practice methodology, entitled 'Understanding problem drug use among young people accessing drug services'[74]. This report outlined barriers to be overcome to engage with young people who use drugs, and with their parents. The report's main recommendations for the engagement we were to undertake included:

Establishing trust – In most cases the respondent had not had contact with researchers prior to the interview. For some young people this made it very difficult to accept the assurance of confidentiality. Their concerns were understandable as they were being asked to trust a stranger. It was found to be essential that the researcher took time to explain that the interviews were confidential and to be very clear about the circumstances in which confidence would need to be broken (i.e. when child protection issues arose). Young people needed the opportunity to ask questions to establish the boundaries of the

[72] Online: http://www.demos.co.uk/files/betterhumansweb.pdf

[73] United Nations Office for Drug Control and Crime Prevention (UNODC), School-based Drug Education: A guide for practitioners and the wider community. 2003. Vienna Online: http://portal.unesco.org/education/en/file_download.php/10dd0aaecf6fd8e82c7c7792ac459d27CC3+UNODC+Engaging+Parents.doc

[74] Online: http://www.homeoffice.gov.uk/rds/pdfs04/rdsolr1504.pdf

interview. These guidelines were followed in all meetings with young people throughout the *drugsfutures* project.

Interview settings – The researchers established a number of ways to start an interview. This flexibility allowed a broader range of young people to be accessed. In *drugsfutures,* outreach events took place in youth centres or schools, and young people were taken to the larger events by researchers known to them through the outreach. This ensured that young people were as comfortable as possible with the settings.

Informed consent – Informed consent was gained from each client before they were interviewed. Previous studies have experienced difficulties in gaining consent from vulnerable young people, particularly minors. Many studies have felt it more ethical to gain consent from the parents. It was decided that interviews should take a maximum of 40 minutes, since experience suggested that young people might become restless, bored and irritated during longer interviews. In line with this, the *drugsfutures* events asked younger participants to stay only for the morning sessions to ensure the best use of their efforts, and consent was sought from young people themselves, the youth centres which young people were recruited from and parents where participants were under the age of 16.

The issue of substance-misusing parents is addressed in the paper by the National Treatment Agency[75] but no details of appropriate research methodologies or public opinions on what is acceptable and what is not are included. Debate has been provoked recently by Professor Neil McKeganey of Glasgow University's Centre for Drug Misuse Research. His research into the effect of drug-using parents on children's lives led him to propose[76] that addicts should lose custody of their children. The public reaction to this proposal was largely negative.

Medical treatment of mental health: young people's and parents' views

It is common for young people to experience mental health difficulties that require professional help, although few adolescents are affected by a serious mental disorder[77]. The British Medical Association reported recently that the number of children suffering from mental health problems has doubled in the past 30 years, with one million boys and girls under the age of 16 affected. The stigma of having a mental health difficulty, illness or disorder can often leave a young person frightened to talk about their problem. This inhibits meaningful public engagement, a factor which must be taken into account when one considers the problem of involving young people and their parents in social research on their perceptions of treatments. Many of the methodological findings from the previous section are also relevant here and issues such as trust, settings and 'informed consent' are all vital.

[75] Online: http://www.nta.nhs.uk/frameset.asp?u=http://www.nta.nhs.uk/publications/mocpart2/chapter3_5.htm

[76] Bowditch G, 'Scotland needs a fix', The Sunday Times – Scotland, June 2006

[77] Institute of Psychiatry, King's College London, Online: http://www.mentalhealthcare.org.uk/content/?id=93

A guide[78] has been prepared by YoungMinds, a national charity committed to improving the mental health of young people, that can be used to inform this strand of work.

The guide highlights ethical issues that need to be considered when involving young people in research into mental health treatments. A study by Claveirole[79] quoted in the guide emphasises that it is important to find a balance between protecting young people's best interests and recognising their right to exert their competence. Key issues include:

- Children's entitlement to confidentiality, and its boundaries.
- Informed consent
- Consideration of a child or young person's mental state.
- The provision of support should a young person become distressed as result of a research interview.
- Appropriate methodologies and recognition of the power imbalance will between adults and children. This may require careful monitoring in research situations.

A particular problem in planning research with young people is that mental health services work with young people who have been referred by others. The young person may not think that they have a problem, or may not want to change. In the *drugsfutures* events no young people with declared mental health problems were interviewed. But many of these findings are clearly relevant to the involvement of adults with similar problems.

The YoungMinds study 'Where Next?'[80] also explored ways of consulting young people about the treatments they receive for mental health problems. They found that

- Initial information about the consultation is important and ideally should be shared in person by someone known to the young person, and be backed up by written information.
- Roles need to be clear – who will interview them, when and where this will happen, what will happen afterwards to the information?
- It is very helpful to involve young people themselves in the design of any paperwork, questionnaires and so forth, to ensure that the language is relevant and age-appropriate.
- It is important to stress confidentiality and to explain its boundaries, both orally and in written form.
- Qualitative research methods perhaps work better than quantitative in engaging young people and allowing them to raise issues that concern them personally.

[78] Street C and Herts B, 'A guide for practioners working in services to promote the mental health and well-being of children and young people', YoungMinds, 2005

[79] Claveirole, A. (2004). Listening to young voices: challenges of research with adolescent mental health service users. Journal of Psychiatric & Mental Health Nursing, 11 (3), pp. 253-260.

[80] Street, C. & Svanberg, J. (2003). Where Next? New directions in in-patient mental health services for young people. Report 1. Different models of provision for young people: facts and figures. London: YoungMinds

Cognition enhancers : young people's and parents' views

The moral and ethical dilemma of whether to give a child a cognition enhancer is challenging and is the main focus of literature in this area. 'The cognition enhanced classroom' by Demos[81] discusses the use of 'Smart Drugs' to improve outcomes for children and talks about issues such as parity of opportunity, the ethical implications of 'drugging' youths and the potential benefits of further researching this possible route for education and society at large.

The growth in diagnosis and pharmaceutical treatment of ADHD is also relevant here. Almost 400,000 children were prescribed Ritalin last year in the UK, up from a base of almost zero in the 1990s[82]. Parents appear to be increasingly turning to cognition enhancers for problems that many believe should be treated through other routes.

This field has not been explored specifically by public engagement, but many of the findings from previous sections will be applicable here .

Addiction

The Foresight project[83] defined addiction as *'an intense compulsion to take a drug, over which the individual has impaired control, despite serious adverse consequences.'* The recreational drugs most commonly associated with addiction are heroin and cocaine, in particular crack cocaine. While other drugs such as ecstasy and cannabis can take on an increased importance in people's lives, they are not thought to be physiologically addictive in the same way that heroin and cocaine are.

Research designed to uncover public perception of addiction to recreational drugs

A certain amount of public engagement has been conducted with those already addicted to recreational drugs. This offers us insight into public views, and possible methods that can be employed to uncover further views. The rise in drug user involvement in treatment decisions has led to the development of advice by interested organisations (for example Drug advocacy organisations, Primary Care Trust guidelines, and other healthcare professionals). These give us some guidance on how best to include drug users in our research. One such report by the Joseph Rowntree Foundation[84] found that drug users, as has been found for other 'vulnerable' participants, need to be reassured about the reasons behind any research, to have the process explained fully and to be kept up to date after the research has finished. All these were incorporated into the *drugsfutures* methodology.

[81] Online: http://www.demos.co.uk/files/File/BH-7.pdf

[82] Online: http://www.telegraph.co.uk/health/main.jhtml?view=DETAILS&grid=&xml=/health/2006/09/25/nkids23.xml

[83] Online: http://www.dti.gov.uk/files/file15395.pdf

[84] Drug user involvement in treatment decisions, Fischer et al,

Addiction and medicines for mental health

Addiction to treatments for mental health is reportedly rare. Indeed, adherence to treatment regimes is more often the problem. There is, however, an overlap between those who have addiction problems and those with mental health problems. According to the Royal College of Psychiatrists, approximately half of those using drug and alcohol services have some form of mental health problem, most commonly depression or personality disorder. It is estimated that about one-third of psychiatric patients with severe mental illness have a substance misuse problem[85].

Addiction and cognition enhancers

The bulk of research on addiction and cognition enhancers concerns drugs that can be used to treat forms of addiction. The Foresight project report 'Drugs Futures 2025: Perspective of the pharmaceutical industry' tells us that *'improved identification of the genetic contribution to addiction could help through pharmacogenomics to identify treatment groups, even if such work did not lead to new molecular targets for therapy'*[86].

Examples of this type of treatment include Zyban. This is a drug marketed by Glaxo-Wellcome, now GSK, which has been used, Glaxo claims 'very successfully', to treat nicotine addiction directly[87].

Industry views of the future of this area were sought by the Foresight BSAD project for its report on the perspective of the pharmaceutical industry[88]. 16 pharmaceutical companies took part and their views on potential new preventions and treatments for addiction and problem use were collated. The pharmaceutical company respondents covered a wide range of scientific and business issues that could have an impact on the development of new treatments.

The ethical question of removing the choice of the addict to be treated is one that will have to be faced if and when such treatments become available. For nicotine and cocaine, this could be in five years, the industry experts claim. Opinion on a timeframe for the development of cognition enhancing drugs to unlearn addiction was very mixed, ranging from never, to low probability even in 15 years, to moderate probability within five. Anti-craving drugs, drugs to improve compliance, drugs to ease withdrawal, specific treatments for alcoholism and the need for simultaneous treatment of psychiatric co-morbidities such as depression and schizophrenia were mentioned by a number of correspondents as being feasible in this 20-year timeframe.

[85] Online: http://news.independent.co.uk/uk/health_medical/article1819665.ece

[86] Page 13, Online: http://www.dti.gov.uk/files/file15395.pdf

[87] Online: http://www.chm.bris.ac.uk/motm/zyban/zyban.htm

[88] Online: http://www.dti.gov.uk/files/file15395.pdf

Appendix 2. Profile of participants

In total, 727 people took part in this project (not including Consortium members, and expert speakers at workshops and Brainbox). This figure is broken down below.

Project Launch

Location/Date	***Attendees***	
London – Dana centre 31st Jan	36 public (booked through Dana centre) 45 recruited public 8 from local organisations 24 invited, including policy makers & scientists	
	113 total participants	

Online consultation

Location/Date	***Participants***
31st January - 2nd April 2007	125 participated in the online consultation A further 194 registered on the website
	314 registered

OPM Fieldwork – general public participants[89]

Location/Date	***Theme (attendees in brackets*)***	***Outreach groups***
Birmingham 2nd/3rd Feb & 30th/31st March	Brainbox - all 5 themes 25 participants (Stage 1) 23 participants (Stage 2)	N/A
Liverpool – 17th Feb	Drugs and the Law (26) 38 in total	2 parent groups (17) 1 ex-user group (9)
Exeter – 24th Feb	Drugs and Society (22) 33 total	1 student group (6) 1 teacher group (7) 1 user/ex-user group (10)
Glasgow – 3rd March	Drugs for a smarter brain (19) 28 total	2 groups- parents of children with ADHD (9) 1 student group (6)
Belfast – 10th March	Drugs and Young People (30) 41 total	2 young people groups (13) 1 parents group (7)
Merthyr Tydfil – 24th March	Drugs and Mental Health (24) 40 total	1 mental health service user (10) 1 mental health + carers group (9)

[89] For a detailed breakdown of the demographic profiles of recruited participants, please refer to Chart 1 on pages 34 & 35

		1 older people group (8)
London – 19th March	3 drug types (drugs for mental health, recreational drugs, cognition enhancers)	1 user/ex-user group (8)
Totals	**146 general public**	**127 outreach**

* numbers in brackets for workshops denote recruited general public attendees. The total for each workshop includes outreach group representatives (who have been accounted for in the Outreach column)

BA Fieldwork – general public participants

The BA ran 3 discussion groups, as follows:

Location/Date	***Theme***	***Outreach groups***
Newham – 13th February	Drugs and Mental Health	1 group (African-Caribbean Carer's Forum) (14)
Norwich – 21st February	Drugs and the Law	1 group (St Edmund's Society) (7)
Norwich – 22nd February	Drugs and Society	1 group (Norwich Community Exchange) (6)
Totals		**27**

OPM Fieldwork – 'expert' participants

Launch event

Scientists and Policymakers
Crispin Acton, Programme Manager, Substance Misuse, DH Nick Lawrence, Head of Drug & Alcohol Policy, DH Sue Bolton + colleague, Office of Science and Innovation Stephen Moore, , Head – Crime & Drug Legislation & Enforcement Unit, Home Office Steven Tippell, Head of the Drug Strategy Unit , Home Office Jeremy Clayton, Group Director, Transdepartmental Science and Technology , OSI Gary Kass, Head of Public Engagement , Science and Innovation Group, Office of Science and Innovation, Alison Crowther, Dialogue Director, Sciencewise Sir Gabriel Horn, Chair, AMS Working Group, Brain Science, Addiction and Drugs project Prof Trevor Robbins, AMS Working Group, BSAD project Prof Les Iverson, AMS Working Group, BSAD project Prof Barbara Sahakian, University of Cambridge Dr Danielle Turner, University of Cambridge Dr Kim Wolff, National Addictions Centre, Institute of Psychiatry Dr David Dexter, Imperial College Dr Susan Aldridge, author of 'Use Your Brain to Beat Addiction' Dr John Marsden, National Addictions Centre, Institute of Psychiatry

Harry Shapiro, Drugscope Liz Brice, campaigner for medical use of cannabis

Workshops and Brainbox

Theme	Expert
Brainbox	*Stage 1:* Professor Philip Cowen FMedSci, University of Oxford *Stage 2:* Dr Danielle Turner, University of Cambridge Dr Rebecca Roache, University of Oxford Daren Garratt, Director, UKHRA Keri Tozer and Sue Garnett, Relay Project, Liverpool Robin Felton, Alzheimer's Society Rebecca Swift, Birmingham and Solihull Mental Health Trust
Drugs and the law	Professor Roger Brownsword, Kings College London Professor Jonathan Wolff, University College London Niamh Eastwood (Release) DI William Stupples, Matrix Unit (Drugs), Merseyside Police
Drugs and Society	Professor Les Iverson FRS, University of Oxford Dr Matthew Hickman, University of Bristol Tim Payne, Exeter College
Drugs for a smarter brain	Dr Danielle Turner, University of Cambridge Dr Anders Sandberg, University of Oxford Dr Brian Canavan, University of Glasgow
Drugs and young people	Dr Patrick McCrystal, Queens University Belfast Sheila McEntee, SE Belfast NHS Trust
Drugs and mental health	Professor Jacqueline Barnes, Birkbeck, University of London Sharon Davies, Hafal Christine Bounds, Gurnos House
Brainbox Stage 2	Dr Danielle Turner, University of Cambridge Dr Rebecca Roache, University of Oxford Daren Garratt, Director, UKHRA Keri Tozer and Sue Garnett, Relay Project, Liverpool Robin Felton, Alzheimer's Society Rebecca Swift, Birmingham and Solihull Mental Health Trust

Demographic profiles of recruited participants

Chart 1		Gender		AGE						SEG						Ethnicity			
Workshops	**Total**	**M**	**F**	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65 +**	**A**	**B**	**C 1**	**C 2**	**D**	**E**	**white**	**asian / asian british**	**black brit / african**	**othe r**
Launch event	33	17	16	8	10	5	2	3	5	0	7	12	10	0	4	9	9	14	1
Brainbox	25	13	12	5	4	6	3	3	4	1	10	3	9	1	1	20	3	2	0
Belfast	25	13	12	8	7	5	3	2	0	0	6	10	4	4	1	21	3	1	0
Merthyr	24	11	13	4	1	5	5	5	4	0	3	5	7	5	4	22	2	0	0
Exeter	22	11	11	4	5	7	2	3	1	0	1	13	1	5	2	22	0	0	0
Glasgow	19	7	12	6	5	4	3	1	0	0	4	4	3	3	0	15	1	3	0
Liverpool	24	12	12	5	5	5	4	3	2	0	3	7	2	5	6	19	2	2	1
Totals with profiles	**172**	**84**	**88**	**40**	**37**	**37**	**22**	**20**	**16**	**1**	**34**	**54**	**36**	**23**	**18**	**128**	**20**	**22**	**2**
	(19 last minute top-up recruitment - no profiles available)																		
Total recruited	**191 attended**																		

continued overleaf

Demographic profiles of recruited participants (cont'd)

Chart 1 (cont'd)		Working status								Follows Science issues*			
Workshops	Total	F/T	P/T	Unemployed / not working	Carer	Retired	Long-term disability	Lone Parent	Children	Always	Occasionally	Never	Mental health services experience**
Launch event	33	18	3	8	1	3	3	4	7	not asked†	not asked†	not asked†	not asked
Brainbox	25	11	4	4	2	4	2	0	10	2	15	8	not asked
Belfast	25	19	0	3	0	3	0	0	7	3	11	11	not asked
Merthyr	24	10	3	1	3	9	4	3	5	4	9	11	5
Exeter	22	4	8	5	0	0	5	0	8	6	13	3	not asked
Glasgow	19	11	3	3	0	0	0	4	7	0	6	13	not asked
Liverpool	24	6	6	7	2	2	4	6	9	0	14	10	not asked
Totals with profiles	**172**	**79**	**27**	**31**	**8**	**21**	**18**	**17**	**53**	**15**	**68**	**56**	**5**
	(19 last minute top-up recruitment - no profiles available)												**asked Merthyr invitees only
Total recruited	**191 attended**												
										* not asked launch invitees			
										† Visit the science museum how often (asked launch invitees only)			
										every couple of months	twice a year	once a year	every few years	never
										3	3	3	14	10

Appendix 3. Launch event

Leaflet for launch event

Available throughout the evening

To reflect on the evening's discussion and to express your views individually, please visit www.drugsfutures.org.uk. Terminals are available in d.lounge.

d.café
(lower ground floor)
Light meals until 20.30, drinks and snacks available.

d.lounge
(upper ground floor)
Check the Dana website for forthcoming events, webcasts and online debates.

'Get yourself on Dana's mailing list, the amount of activity leaves one breathless.' Museums Journal

Sign up to our e-newsletter at:
www.danacentre.org.uk

Gloucester Road
Dana Centre, Wellcome Wolfson Building,
165 Queen's Gate, SW7 5HD

This is a smoke-free environment. The Dana Centre and d.café are licensed premises open only to those aged 18 or over.

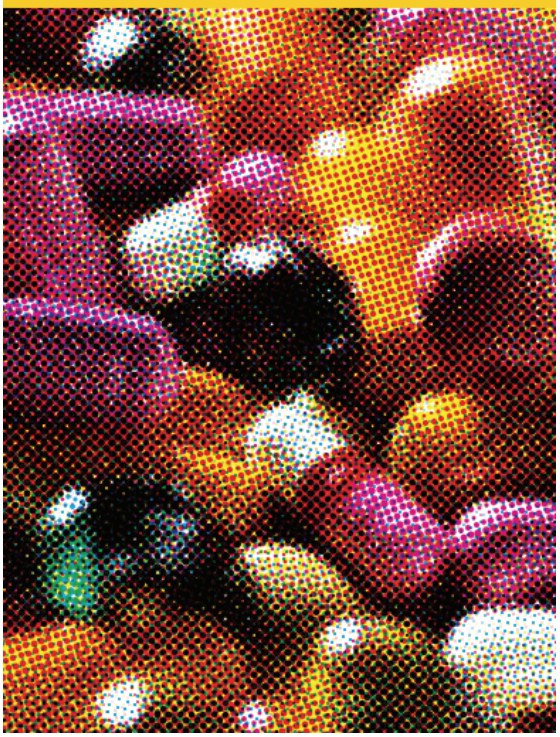
Disabled parking only. Residents' parking restrictions apply until 22.00 hours.

Reuse and recycle
This leaflet has been produced using sustainable resources.

The Dana Centre is a collaboration between the BA (British Association for the Advancement of Science), The European Dana Alliance for the Brain (EDAB) and the Science Museum. It is part of the Wellcome Wolfson Building, which is supported by four principal donors - the Wellcome Trust, the Wolfson Foundation, The Dana Foundation and the Garfield Weston Foundation.

dana centre
eat, drink, talk science

events
drugsfutures
Wednesday 31 January
19.00–21.30



The drugsfutures project, commissioned by the Academy of Medical Sciences and funded by the DTI's Sciencewise programme, aims to engage the public in a discussion about the drug culture we want in the future.

There's a full evening of exploration and discovery through discussion, performance and games. If you would like to make individual comments you can use the computers here in the d.lounge to visit the project website: www.drugsfutures.org.uk

Use the following list to select and book your place to make sure you don't miss anything.

d.café
Drugs and the Brain: You asked for it

This performance explores four young people's views and experiences of drugs. Your discussions in Sessions A-D will help provide the characters with ideas to move the performance along.

d.study
Drugs for a Smarter Brain

Is it OK to enhance your brain power by popping 'smart pills'? Come and talk to the experts about new drugs on the horizon and try some more traditional methods of brain enhancement.

d.studio
Table talks

Discuss the issues with others, including scientists. Explore the future of drugs and brain science.

Table talk 1
Drugs and Society

Why do people take drugs – even illegal drugs? Is addiction a health problem – or a crime problem – or both?

Table talk 2
Drugs and the Law

Why do we need to regulate drugs – and who decides how we should do this? How do we decide which punishments fit which harms?

Table talk 3
Drugs and Young People

What kinds of drugs is it acceptable for young people to take? What are the pros and cons of identifying a young person as 'vulnerable' to drug use or addiction?

Table talk 4
Drugs and Mental Health

Drugs can help with mental health conditions. Future drugs may be able to give you a lift when you're feeling down or make the shy confident. Is it appropriate to treat all mental health conditions with drugs?

d.café
Roundup

It's the final improvised performance of the night. Have your views been challenged? Take part in electronic voting and see what everyone else thinks...

Timetable of events

18.30	All sessions are ticketed. Please book in the café on arrival.		
19.00	Introduction to drugsfutures		
	d.café	d.studio	d.study
19.05	Drugs and the Brain: You asked for it		
19.15	Explanation of booking and event times		
19.25	Sessions A-D	Table talks 1–4	Drugs for a Smarter Brain drop-in session
19.50	Sessions A-D		
20.15	Performance		
20.25	Sessions A-D	Table talks 1–4	Drugs for a Smarter Brain drop-in session
20.50	Sessions A-D		
21.15	Final performance		
21.25	Roundup and vote		
21.30	End		
22.00	d.café closes		

Table Talk questions

Table talk questions: Drugs and the law

- Why do we need laws to regulate the way we use drugs?
- Prompts, if necessary: What do you think about particular laws:
  - The possible raising of the age at which you can buy cigarettes: (This is currently 16, but there is discussion about raising it to 18.)
  - Drinking alcohol being legal
  - Cannabis being illegal?
  - Heroin being illegal?
- How would you like to see access to drugs controlled in the future?
  - Eg, should we be more strict or more relaxed in our attitude to possession of small amounts of drugs
  - Do we need new forms of regulation – for example, being able to buy some drugs at licensed outlets, if you're over a certain age (much like alcohol is sold now)?
- Should we treat people who are addicted to illegal drugs as people who are ill and need medical treatment or as criminals?

Table talk questions: Drugs and Society

- Why do you think people take recreational drugs even though they are illegal?
  - Prompts (if needed): fun, peer pressure, easy access to drugs, rebellion, unhappiness/depression, media influence etc
- If we could develop a recreational drug that was less harmful than existing recreational drugs, and not addictive, should anyone who wanted be allowed to take it?
  - PROMPTS: what might be the wider impact on society if lots of people started taking this kind of drug? What might the benefits be (probe on different kinds of effects – eg, made you happy, meant you could stay awake longer, made you very relaxed etc)
- Where do you think the impact of illegal drug use is most heavily felt?
  - PROMPTS: user's health, crime, user's family, community
  - Which harms do you think are the most serious (probe: those that come directly from using a drug – eg, more likely to be individual/family harms) or those that come from the way we regulate drugs (eg, the drug trade, crime committed by people to pay for their drugs etc)

Table Talk questions - Drugs and Young People

(**There are a lot of questions here – just focus on the top 2/3 – don't think you have to cover them all – it's just help in case the conversation lags!)**

- What are the best ways to prevent young people from using drugs?
  - PROMPTS IF NECESSARY: random drug testing, education & information, making sure other activities available, drug sniffer dogs in schools (which are being used in some schools); educating parents etc
- What factors do you think influence whether young people take drugs?
  - PROMPTS: individual characteristics (impulsive personality); family and wider environment (eg, child abuse, parents who use drugs, access to drugs in the community etc); genetic make-up

- If in the future we could identify which young people are most likely to use drugs do you think this would be helpful and why?
  - PROMPTS: what would we do with the information? Who should be allowed to see it? How do you think people would respond to being told they or their child was particularly likely to use drugs?
- Where can you find out about the harms and benefits to young people of recreational drug?
  - (PROMPTS if needed: magazines, internet, doctors, friends etc)
  - What sources of information do you see as trustworthy – and why?
- If you wanted to find out about the harms and benefits to young people of mental health drugs, where would you go?
  - What sources of information do you see as trustworthy – and why?
- Why do you think people worry about young people experimenting with drugs? – (LEAST PREFERRED QUESTION)
-

Table Talk questions - Drugs and mental health

- If someone is diagnosed with a mental health problem and there is a drug available which might help them, should they be required to take it?
  - PROMPTS if needed: eg, so that they're not a burden on the health services; so they can return to work; to make sure they're not a danger to wider society
  - PROMPTS: does it make any difference what kind of mental health problem it is – eg, mild depression or severe depression, schizophrenia, age-related mental health problems like Alzheimer's Disease or dementia
  - Should children be made to take drugs for mental health problems (DON'T GET SIDE-TRACKED ONTO ISSUES ABOUT YOUNG PEOPLE & DRUGS!)
- In the future, we may develop drugs for conditions that we think of as aspects of someone's personality at the moment – for example, shyness. What do you think the effects of having drugs for this kind of condition might be? What would be the advantages and disadvantages?
  - For what 'conditions' or aspects of personality would you like to see drugs developed?

Appendix 4. Drugs and the Law

Outreach discussion guide

Introduction to group:

- Discussion today is part of a nationwide project, commissioned by the Academy of Medical Sciences (locations, website etc
- write-up url (www.drugsfutures.org.uk) and ask people to visit it if they have access to a computer – and tell their friends!
- Findings will be reported to the AMS working group, who will include them in their report to the government.
- Explain why the views of your particular group are so important to the project: eg, if it's parents, talk about the role of regulation in protecting young people; if it's users/recovering users, they will have particular insight into the impact of the way that regulation works, either because they've been involved with the criminal justice system or because it impacts on how they access drugs / the social networks they get involved with etc;

Introductions (5 mins)

- In pairs: get your partner's name and have a quick discussion about the first things that come into your head when you hear the word 'drugs'.
- Round the room: each person introduces their partner and their top-of-mind associations with 'drugs'. Explore anything interesting / unusual. (Anything that's **not** related to law/crime in particular.)

Focus of discussion: (5-10 mins)

- We're looking at knowledge about the brain and new drugs that might be developed in the future and how, as a society, we should regulate (or not regulate) drugs.
- Interested in your views of how effective the law is currently and whether there are other approaches we might take to regulating drugs than the one we use at the moment.

EMPHASISE: you don't need to know anything about the topic – don't need to know about drugs or about the law. We're interested in your views about how we, as a society, should respond to the new possibilities that science may give us in the future.

Questions?
Mobiles off.

Before we start discussion: Explain about workshop: give people the date: say you'd like to invite some of the people here today to the workshop and at the end of the discussion,

after people have had time to check their diaries and think about it a bit, you'll put names in a hat (those who are available to come on the day) and draw names. (I suggest, if possible, that you draw 7 names – some will probably drop out beforehand and if we're a few over, we can live with that. Mentioning incentives might help to encourage interest – but gauge this, as we don't want lots of fed-up people who wanted to come & wanted the money – this will depend on how many people in the group and what they seem like.

Changing attitudes (10 mins)

- How do you think our attitudes towards drug use will change in the future?
  - Explore: become more liberal/more restrictive; become more evidence-based; things currently legal becoming illegal; things currently illegal becoming legal

- Why do you think people start taking illegal drugs, despite the risk of punishment?
  - Explore: mental health problems; environmental/family/individual circumstances; for fun; peer pressure; other reasons

  FLIP CHART REASONS: EXPLORE ATTITUDES (eg, are some of these reasons justified, understandable?)

- When people start to use drugs, for whatever reason, do you think they consider the wider implications of their use? (eg, to what extent are people's decisions rational?) **(15-20 mins)**
  - Eg, wider harms to family/community/society?
  - Explore harms: FLIPCHART in 3 columns – harms to individual/harms to community/harms to society: explore extent to which harms are a direct consequence of drug use or a consequence of the way in which we regulate drug use

- One of the things we will need to consider, when we are thinking about how to regulate drugs in the future, is how should we balance the rights of individuals against the rights of their family/community and wider society, taking into consideration the harms we've identified? **(20 mins)**
  - When thinking about how to regulate drugs in the future, should the government focus on the protection of vulnerable people or on the rights of the individual?
  - If we regulate on the basis of the rights of adults to make their own decision about whether or not to take drugs, what should we do about adults who are not equipped, for whatever reason, to take that decision (eg, mental health problems, family situation etc etc)

- When we're thinking about how to regulate drugs in the future, we could take a health perspective or a law enforcement perspective: (**20 mins)**
  - Which perspective do you think would be most effective?

- What do you think the differences would be in the way we regulated drugs in the future, between a health perspective and a law enforcement perspective?

(FLIPCHART: 2 columns: health perspective / law enforcement perspective: relate to discussion of harms at different levels: which harms will be addressed most effectively by each perspective. Have we balanced harms to / rights of the individual / community / society? What gaps are there in each approach, if all harms not covered? How might we address these?)

Wrap-up

- Review key points from discussion, eg:
  - attitudes will change in these ways;
  - these are the reasons we think people take illegal drugs;
  - people do / don't consider the implications of their drug use (to themselves; their family/community; to wider society);
  - balancing the rights of the individual against the rights of wider society will involve us taking xxx into consideration; emphasis should be on … (eg, protecting vulnerable people/stopping young people from getting into drugs; protecting individual's rights to take drugs etc)
  - regulation based on health perspective would involve x (refer to flipcharts); regulation based on law enforcement would involve y (refer to flipcharts)
  - this is how we think these types of regulation would address the harms we have identified, at individual, family and community level
- Check group is happy with summary / doesn't want to add anything.
- Any more questions?

Return to workshop issue:

Ask who can come: get contact details form (get landline & mobile & email addresses, if possible). The group organiser may wish to act as a channel for accessing participants. Give them the details of the workshop and say that someone will contact them again next week to check that they're still ok to come, answer any questions etc.

In some groups (especially the user groups) it will be important to emphasise that we will not identify people attending the workshop – they will all just be 'general public'. We will not indicate who, amongst workshop participants, has been to a previous discussion, for example.

EVALUATION FORMS!

Workshop - Facilitators' Agenda

9.30–9.45 Introductions
Welcome (OPM):
Brief overview of theme
Agenda
Business (fire escape/toilets/mobiles)

9.45-10.00 WG member (if available):
Project background
Use of output

Session 1
Plenary: ppvote session
OPM explains reason for vote / repetition at end of day, when results will be shown

Questions (following warm-up):

Do you think the use of illegal drugs in this country is increasing or decreasing?
Increasing
Decreasing
Staying the same
Not sure

What do you think is the best course of action for someone who uses illegal drugs?
Send them to prison
Give them medical treatment for their addiction
Give them other forms of support (e.g. counselling, advice, education)
Not sure

Which of the following drugs do you think causes the most harm to an individual?
Heroin
Nicotine
Ecstasy
Cannabis
Alcohol

Which of the following drugs do you think causes the most harm to wider society?
Heroin
Nicotine
Ecstasy
Cannabis
Alcohol

If a recreational drug was invented that caused only minimal harm to an individual or to society would you take it?

Yes 29%
No 71%

If we could develop a drug which prevents addiction given these options do you think we should make it?
Compulsory for everyone
Compulsory for those deemed to be at risk of addiction
Available only on prescription
Available over the counter for adults to choose to buy for their own use
Available over the counter for adults to buy to give to their children
Illegal to make or use
Not sure

10.30–11.00 Introduction to the issues
In small, facilitated groups:

Review and discuss background information on:
Changes in use of drugs (ie, increase)
Figures on harm (cost to country – crime/health)
Spending: distribution/amount on crime, health, education
Information on success of different approaches (prison/healthcare/maintenance)

Facilitators: by end of session, you should have:
List of questions raised by discussion
Group view of whether current approach is effective/ineffective
Suggestions on new approaches for the future

11.00–11.15 BREAK

11.15–11.45 Providing the background – scenarios and briefing notes
Small group work – 4 facilitated groups.

Facilitator reads the scenario to the group: brief discussion of initial responses.

Facilitator reads through briefing notes with group: brief discussion of initial responses: anything seen as particularly relevant to the scenario.

Opening 3 questions (these are primarily for warm-up, but will be reviewed in the plenary, when people can add comments).

How do you feel about the 'punishment' that Frank has received as an alternative to prison?
Is there anything else that you think should be done to help Frank?
Why do you think people start taking illegal drugs, despite the risk of punishment?

11.45–12.30 Each group feeds back key points from discussion (10 minutes)

General discussion about issues raised (with focus on future).
Questions raised in 10.30-11.00 slot to be answered in this session, if possible. If not, questions to be posted for experts arriving in the afternoon.

12.30–13.15 Lunch

13.15 -13.45 Exploring the issues

Facilitator:
Introduce questions – ensure everyone is clear about what is being asked:

Explore what we know already that would help us to respond – (draw on personal experience, magazine articles, TV, other knowledge). Use briefing notes / information sheets where relevant.

This information to be pasted on the sticky wall (or flipcharted if sticky walls not possible).

Experts: where you have relevant information that might help participants, please feel free to contribute, or ask participants questions. Where you have information about possible future direction (eg, of science or policy in this area, what we've tried that isn't working – eg, education), this is especially useful.

Facilitator to help group relate existing knowledge to the question.

13.45 – 14.45 Answering the questions and presenting the outputs

Taking each question in turn, discuss issues. (Facilitators: please challenge/play Devil's Advocate.) Focus on: anything on which there is clear agreement or disagreement (if someone is offering different views, make sure these are explored).

Ask for a volunteer to write down questions that arise in the discussion. (facilitators can come up with these too, if you think further information would help). These are to be put on the RED cards and posted up.

Experts in each group: you are 'on call' to help each group as required, so please keep your eyes open round the room for red cards. If you can help a group with their question, please join that group for a while (providing not everyone ends up in one group)

In final 15 minutes:
Facilitator: help team to put together a presentation on their discussion findings:
Presentations should include the questions being addressed, their answers to the questions and the reasons for their answers
Decide on who is going to do the presentation (could be the whole group)

14.45 – 15.00 BREAK

(Any new ppvote questions to be entered at this point)

15.00 – 15.30 Each group presents their findings.

15.30 –16.00 Questions and discussion
By close of discussion, we should have:
1. Clear and agreed responses to each of the scenario questions
2. Recommendations for action (eg, policy changes; support that should be developed; medical treatment; where more research might be done)

16.00 - 16.15 Closing ppvote / view results from morning vote;

16.15–16.30 Thanks & close (from OPM & WG member/AMS)
Evaluation questionnaires & incentives

QUESTIONS FOR AFTERNOON SESSIONS
Group 1:

- Should we treat people who are addicted to illegal drugs as people who are ill and need medical treatment or as criminals?
- If we decided to focus on a public health approach, what do you think this should include?

  Explore:

  a. Support for individual(s)
  b. Support for family
  c. Any wider community/society initiatives that might be of value?

Group 2:

- What effect do you think harsher legal punishments would have on people who use illegal drugs?
- What sorts of harsher punishments should be used and who for? (eg, all drug users/those using particular substances/according to their situation etc?
- Should we have the same punishments for all illegal drugs?

Group 3:

- If drugs that are currently illegal were available at the local chemist or supermarket, what impact do you think this would have on the problems that we now associate with illegal drugs?
- Should any drugs be available in this way? (Refer to scenario – availability of marijuana in the pub.)
- What sorts of regulation would need to be in place?

Group 4:

- If we could identify people who are at risk of using or becoming addicted to illegal drugs, how do you think we should use that knowledge?

    eg, tell the person / not tell the person

    Tell someone else (who: doctor, parents, some authority – eg, police, school?)

(Explore attitudes towards developing genetic knowledge: eg, if we develop a test for disposition to addiction and a vaccine against addiction, should we use it? When (eg, what age)? Should it be compulsory?)

Workshop – Participants' Agenda

9.45–10.00 **Introductions**

Welcome and background to *Drugsfutures*

Robin Clark, OPM
Robert Frost, Academy of Medical Sciences

10.00-10.30 **Your views on drugs and drug use**
Voting session

10.30–11.00 **Looking at the issues**
Small group discussion on drug use in the UK

11.00–11.15 BREAK

11.15–11.45 **Frank thinks life is unfair… a possible future**
Small group discussion of the issues raised in the scenario

12.00–12.30 **Feedback on discussion**
Plenary session

12.30–13.15 LUNCH

13.15 -13.30 **Looking at the future – the regulation of drugs**

13.45 – 14.45 **Looking at the future – developing future regulation**

14.45 – 15.00 BREAK

15.00 – 15.30 **Presentation of findings**

15.30 –16.00 **Questions and discussion**
Agreeing on the issues
Recommendations for action

16.00 - 16.15 **Your views on drug use**
Second voting session

16.15–16.30 Thanks & close

Completing evaluation questionnaire
Collecting 'thank-you' envelope

Scenario

A possible future…

The year is 2025, and Frank is angry.

He knows his neighbours Herbie and Sally are in the pub. He is pretty sure that his other neighbour, Jem, is at the bookies betting on the 3.30.

He wants to do both of these things but he can't, all because of the genes in his body.

It all started when he was caught doing some housebreaking. Frank is not a criminal, he says, but he got a little short of money and, he'll admit it, he might have been too keen on heroin.

The judge gave him a pretty simple choice – jail or hospital. After what happened to his mate inside Wandsworth, that was an easy decision. So he was put in hospital. He still has to go back once a month for all sorts of tests and interviews. Compared to prison, it is easy. Prisons are now tougher than they were, reserved for the worst offenders.

But it's still very unfair. He knows that Hafid next door has a prescription and can get cigarettes from Boots. Other people go to the pub and buy beer and marijuana. But his control tag goes mad if he enters any licensed premises, or the betting shop or casino. There are friends who will buy him a bottle – risking a fine if they are caught. But the monthly drug tests mean he can't risk it. If they find he has had any drug, legal or illegal, the injections start. Then he will lose the craving, but the side effects are said to be pretty nasty. And if he does end up back in court, it could be next stop prison, so best not risk it.

Questions

- How do you feel about the 'punishment' that Frank has received as an alternative to prison? Is there anything else that you think should be done to help him?
- Should we treat people who are addicted to illegal drugs as people who are ill and need medical treatment or as criminals?
- What effect do you think harsher legal punishments would have on people who use illegal drugs?
- If drugs that are currently illegal were available at the local chemist or supermarket, what impact do you think this would have on the problems that we now associate with illegal drugs?
- Why do you think people start taking illegal drugs, despite the risk of punishment?

Briefing notes: Drugs and the law

As a society we have decided that people's use of drugs should be regulated and we have over the years devised different ways of doing this. Some drugs are only available on prescription from a doctor. Some can be bought over the counter in a chemist. It is illegal to supply some drugs – for example, heroin or other 'street' drugs. New drugs may not be regulated at all. As a society, we will need to think about whether the way we regulate drugs is effective and whether and how we should regulate new drugs.

What are the penalties?

In the UK, drugs that it is illegal to supply are divided into 3 classes, each with different penalties:

Penalties for possession and dealing

		Possession:	**Dealing:**
Class A	Ecstasy, LSD, heroin, cocaine, crack, magic mushrooms, amphetamines (if prepared for injection).	Up to seven years in prison or an unlimited fine or both.	Up to life in prison or an unlimited fine or both.
Class B	Amphetamines, Methylphenidate (Ritalin), Pholcodine.	Up to five years in prison or an unlimited fine or both.	Up to 14 years in prison or an unlimited fine or both.
Class C	Cannabis, tranquilisers, come painkillers, Gamma hydroxybutyrate (GHB), Ketamine.	Up to two years in prison or an unlimited fine or both.	Up to 14 years in prison or an unlimited fine or both

Other countries classify drugs differently. In New Zealand, a 'Class D' has been introduced, which includes so-called 'party pills' or 'legal highs'. Class D drugs are thought to be of low risk though their use does have some harm. A 'restricted list' sets out things such as where Class D drugs can be sold, who they can be sold to and how they should be packaged.

Alternatives to prison

Perhaps prison is not always the best way to deal with people using illegal drugs. Some of the people who go to prison are no harm to society. Community treatment – like education, counselling and other forms of support - could be made available to these people. However, some people might say that it would send out a better message about drugs if we were 'hardline' in our attitude, and use harsh prison sentences as a way of persuading people not to start taking drugs in the first place.

Drugs and the law – The future

Our current drug laws have developed in a rather haphazard way over the years. For example, if alcohol was classified according to the harm it does, it might be seen as a Class A drug. As we learn more about the brain and the affects of drugs, we will understand more about the harms – and possibly benefits – of different drugs. Social attitudes may still continue to influence the law, though we are moving towards a system based on evidence about the harms of different drugs.

An increasingly important issue to consider is the availability of drugs sold over the internet. Some drugs that are available in the UK on prescription only can also be bought over the internet and may be used by people who don't have the condition that these drugs are designed to treat.

Harm and punishment

All illegal drugs cause some harm to someone. The global drugs trade impacts on us all. Someone in the UK who is using drugs might be harming themselves, but they might also be harming their family, friends and wider community. People who are addicted to heroin commit a lot of crime to get money to buy their next hit. Recently, there has been a lot of debate about whether or not marijuana causes psychosis in young people – leaving the taxpayer to pick up the costs for mental health treatment.

- If we want to base our future drug laws on evidence, which would include the harm done by the drug, we will need to decide which harms it is most important to consider. These include:
  - Harm to society from crime and violence associated with drugs
  - Harm to the economy from the cost of treatment or imprisonment and missed working days
  - Harm to the family from having a drug user within it
  - Harm to the individual – to their health, future prospects and relationships

'It wasn't me, it was the drugs…'

Research on addiction is starting to show that drug users may not have as much control over their behaviour as we used to think. This raises some questions about whether we should hold someone responsible for a crime that they commit under the influence of drugs.

Additional background

The following four hand outs on Illegal drug use in the UK, Health Issues, Crime Issues and Treatment Issues, provide background information for participants to use, if they wished, to gain greater insight and help them to develop their presentations in the workshop on Drugs and the Law.

Illegal drug use in the UK - overview[90]

The use of illegal drugs by young adults in the UK has increased a lot over the longer term. In the UK, we have some of the highest use of illegal drugs in Europe. Use has increased by between 5 and 8 times over the past 30 years.

Drug use in the UK

Surveys suggest that over 3.5 million adults (1 in 5) aged 16 to 59 in England and Wales used a controlled drug in the last year.

- Over one million reported using a class A drug-cocaine or ecstasy are mentioned most
- Over three million reported using cannabis
- It is estimated that there are over 300,000 users dependent on heroin or crack cocaine. One reason for this may be that the cost of heroin and cocaine has gone down over the past 5 years.

Drugs and health

Using recreational, illicit drugs is associated with a range of health and social harms.

- Currently around 1500 people die of drug related poisoning each year; this figure has increased 2-3 fold over the 1990's
- Injecting drug use can transmit a number of viral diseases. For example, over 80% of the 200-300,000 hepatitis C infected individuals in England and Wales are injecting drug users.
- A recent survey of people arrested in England and Wales found that one in four reported using crack in the last year, compared to one in 200 in the general adult population.

Drug treatments

Drug addiction can be treated by the use of other drugs. Most of these treatments work by replacing the addictive drug with another drug that has similar, but less harmful effects on the brain. For example, there are nicotine patches and gum for cigarette smokers. Heroin belongs to a class of drugs called 'opiates' and heroin addiction may be treated by using slow-acting weaker opiates such as methadone or buprenorphine.

[90] Information on this page taken from The Strategy Unit Drugs Report: Phase 1 June 2003

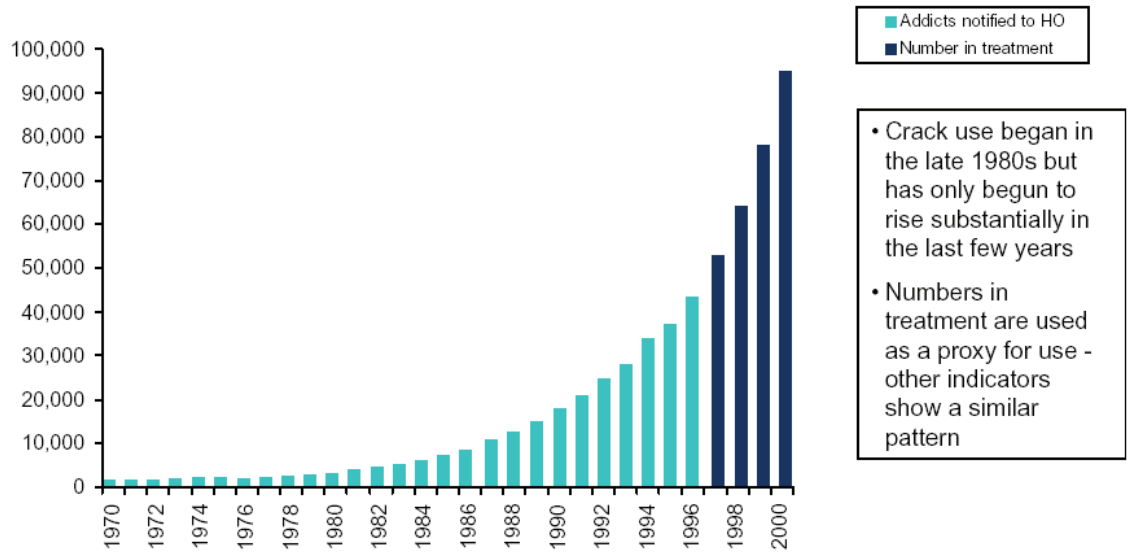
Currently available treatments have had only limited success. Less than ten percent of cigarette smokers who use nicotine replacement products of various kinds remain cigarette-free after six months of treatment. For heroin addicts a relapse rate of 50-60% is commonly seen after three months of methadone treatment.

The cost of drug use[91]

The annual cost of substance misuse to the NHS is estimated to be in excess of £1bn; the estimated costs in terms of lost output by users to be £3bn; and the costs of drug-motivated crime to be between £13-£20bn, representing approximately one third of the total cost of crime.

The use of high harm causing drugs has risen dramatically over the last 30 years

Dependent opiate and cocaine users known to treatment services, by year



Sources: Home Office Addicts Index, Regional Drugs Misuse Treatment Databases. NB it is not possible to separate opiates from cocaine.

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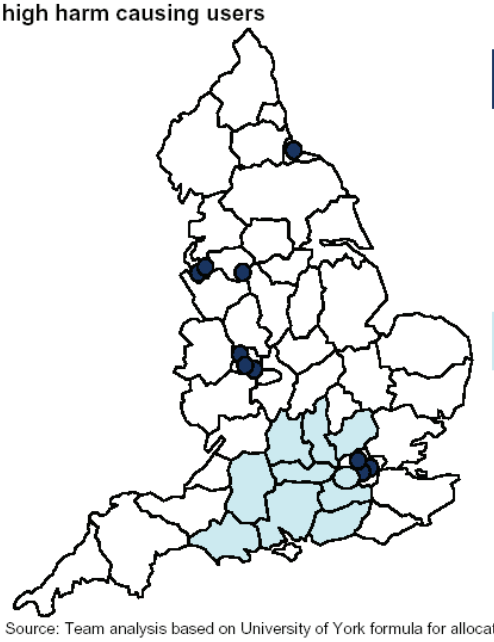
[91] Information on this page taken from The Strategy Unit Drugs Report: Phase 1 June 2003

The 280,000 high harm causing drug users are more likely to be found in deprived urban centres

Health authority areas in England with the highest and lowest proportions of high harm causing users



Highest ten areas (problem drug users per 1000 population 15-44 yrs)			
Liverpool	31	Tees	25
E London	31	St Helen's	24
Manchester	28	Wolverhampton	23
Lambeth	25	Camden & Islington	22
Birmingham	25	Sandwell	22

Lowest ten areas (problem drug users per 1000 population 15-44yrs)			
East Surrey	4	Buckinghamshire	6
West Surrey	4	Hertfordshire	7
N and Mid Hants	5	Berkshire	7
Oxfordshire	6	Kingston & Richm'd	7
W Sussex	6	Wiltshire	7

Source: Team analysis based on University of York formula for allocating resources for dealing with drug misuse.

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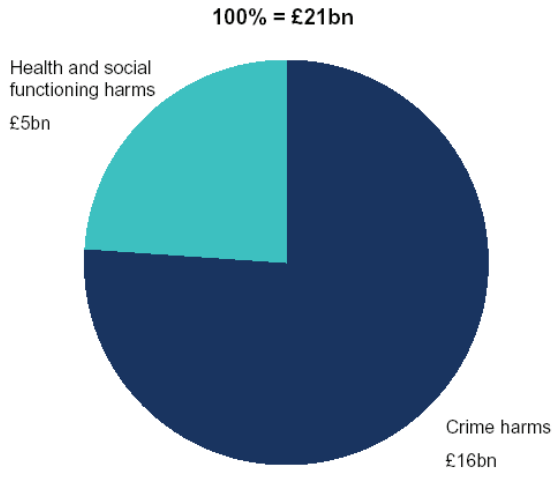
The total cost of all harms caused by heroin and/or crack users is £21bn, with crime harms by far the most costly

Harms caused by heroin and/or crack users per year



Source: Team analysis

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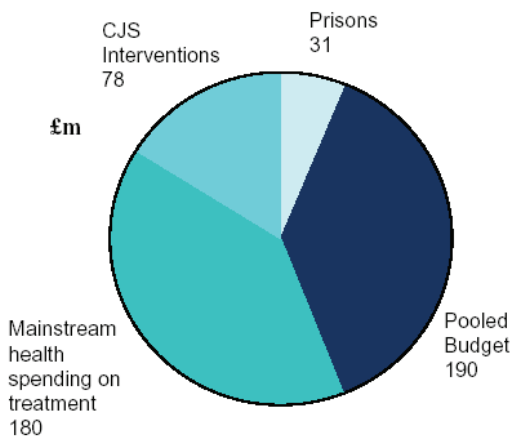
[92] Information on this page taken from The Strategy Unit Drugs Report: Phase 1 June 2003

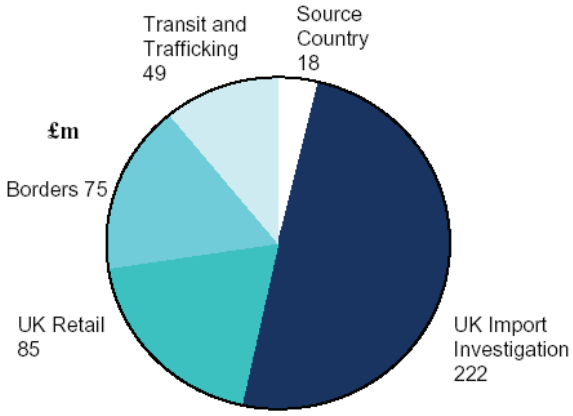
Currently nearly £1bn is spent on drugs, split almost evenly between demand-side and supply-side interventions

Funding

£480m is spent on treatment and CJS interventions



£450m is spent on reducing availability of Class A drugs



ource: SU analysis, Home Office consultancy report on anti-drug expenditure, 2002, HM Government

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[93] Information on this page taken from The Strategy Unit Drugs Report: Phase II December 2003

Drug use in the UK – Health Issues[95]

Heroin and crack are highly addictive, and long term abstinence is achieved by only a minority

Effective treatment

- Heroin and crack are highly addictive because of the speed and intensity of their effect
  - heroin is additionally addictive because of the severe adverse impact when it is withdrawn
- The combination of the high addictiveness of the drugs and the vulnerability of the users, who are most likely to be in or from deprived areas, and to have poor skills and other problems, make HHCUs particularly chaotic and difficult to treat
- Most users reach the point, however, when the impact of drug-taking on their lives (the strain of committing crime; the pain of deteriorating partner and family relationships) creates a desire to lose their habits. BUT, whatever the intention, problem drug use is, unfortunately, a chronic relapsing condition
  - most users experience a continuing cycle of treatment, followed by relapse, followed by a return to treatment
  - nearly half of all HHCUs engage with treatment each year, but most do not stay for long
  - even the minority of users who achieve long term abstinence have on average 4-5 treatment episodes before becoming abstinent
  - long term abstinence rates world-wide are broadly similar to the UK rate of around 20%

Source: NTORS, Cartwright, W (2000)

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[95] All information in this handout is taken from The Strategy Unit Drugs Report: Phase II December 2003

The nature of heroin treatment

Effective treatment

- Heroin treatment in the UK broadly reflects world-wide practice. Current treatment interventions typically include
  - needle exchange programmes: designed to provide clean needles and advice on injecting practices
  - structured counselling: individual and/or group sessions involving discussion of drugs and other lifestyle issues
  - structured day programmes: sessions of different activities including counselling but also complementary therapies, art and skills training
  - community prescribing: prescription of substitutes for heroin, mostly methadone, or blockers such as naltrexone, to prevent relapse
  - inpatient detoxification programmes: designed to support users while ceasing use altogether
  - residential rehabilitation: group and individual activities including counselling, skills training, etc
- Heroin prescribing is also included in the above range of treatments for opiate dependence, but in practice it is rarely utilised. This is due to
  - a reluctance of doctors in general to prescribe heroin
  - the lack of availability of doctors who are licensed to prescribe heroin
  - the high cost of heroin maintenance treatment

Source: Team analysis, NTA Models of Care

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The treatment regime in the UK, however, has not overall had a substantial impact on reducing harms

Effective treatment

- Treatment in the UK has had a limited impact on reducing harms overall because
  - only a small proportion of HHCUs, 20%, are in treatment at any one time
  - even when HHCUs are in treatment, the regime does not bear down sufficiently on crime harms, the biggest category of harm
  - performance across the system as a whole has been variable
- Limited numbers of HHCUs are in treatment at any one time because
  - no one part of the system has gripped and steered chaotic individuals through the multiple services they need
  - individual HHCUs have had themselves to deal with multiple treatment providers
  - there has been insufficient capacity in the system to cope with total need
  - there has been under-provision of critical services, particularly crack treatment

Source: Team analysis, HO

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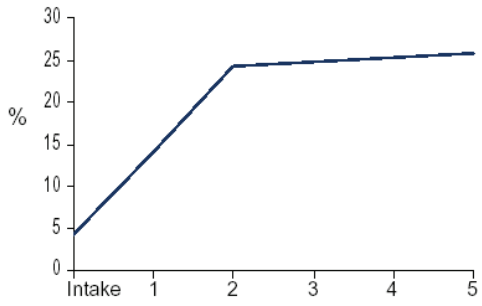
Evidence of heroin treatment effectiveness (1)

Effective treatment

Heroin users achieving abstinence from all drugs



Years since user first entered treatment

The difficulty of achieving abstinence

- Around 25% of users who **enter community treatment** become abstinent from heroin over 5 years
- The path to abstinence or less frequent use may be accompanied by multiple treatment episodes
- **BUT**
  - after 10 years the abstinence rate is closer to 20%
  - a quarter of users who have become abstinent still relapse after 15 years
  - for many individuals, heroin addiction may be a life-long condition
- These figures may **overstate** serious drug abstinence because they do not capture those who substitute crack or other serious drugs for heroin

Source: National Treatment Outcome Research Study (NTORS) 'After Five Years' 2001

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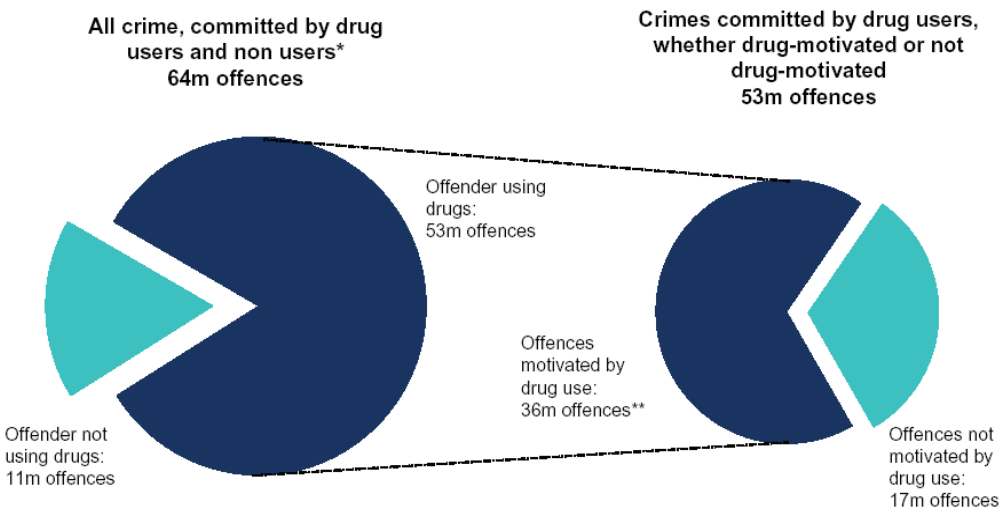
Drug use in the UK – Crime Issues[96]

Drug users are estimated to commit 36m drug-motivated crimes each year, 56% of the total number of crimes



* Offences of possession or supply of drugs were not included because the victims (i.e. the user and society at large) and costs of offences of possession or supply were already taken account of in the other harms we have analysed. Drug user defined as self-reported use of drugs from slide 4 in last 30 days
** Data from NEW ADAM was to make an estimate of the proportion of drug users' crimes which are specifically motivated by drug use
Source: Team analysis, NEW ADAM survey of arrestees 1999-2002, 'Economic and social costs of crime', Home Office 2000

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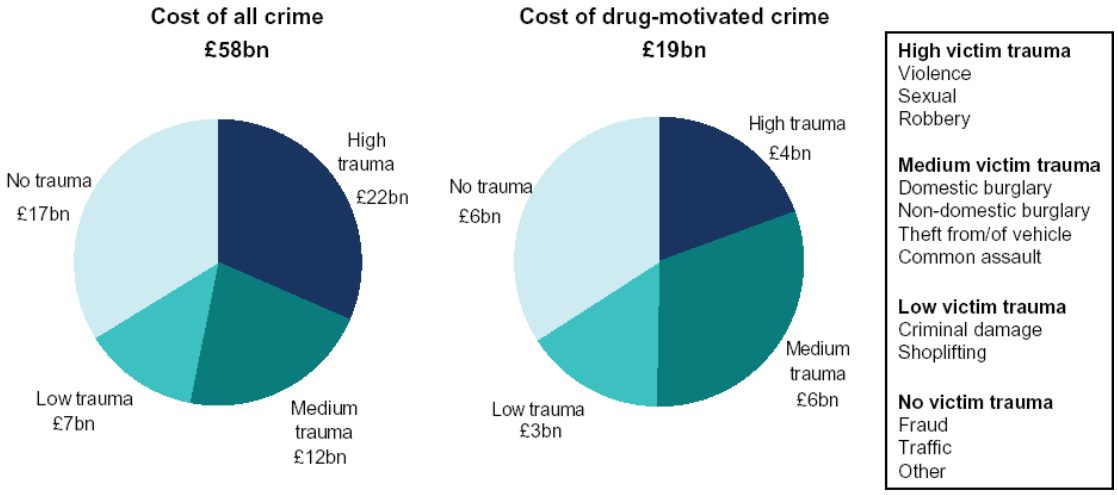
[96] All information in this handout is taken from The Strategy Unit Drugs Report: Phase I June 2003

Drug-motivated crime is skewed towards property crime rather than high victim trauma crimes



Source: Team analysis, NEW ADAM survey of arrestees 1999-2002, 'Economic and social costs of crime'

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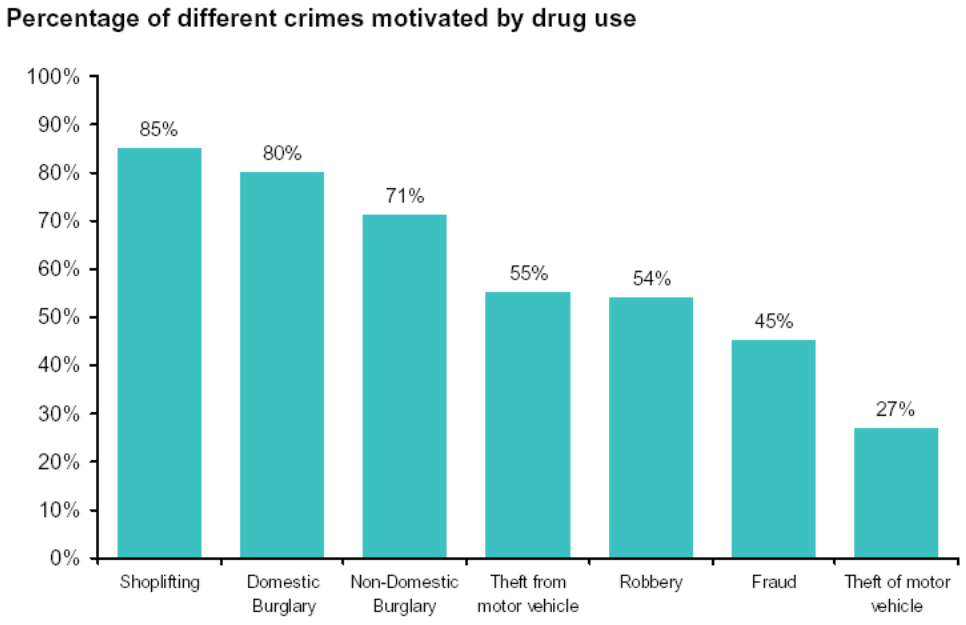
Drug use is responsible for the great majority of some types of crime, such as shoplifting and burglary



Source: Team analysis, NEW ADAM survey of arrestees 1999-2002, 'Economic and social costs of crime'

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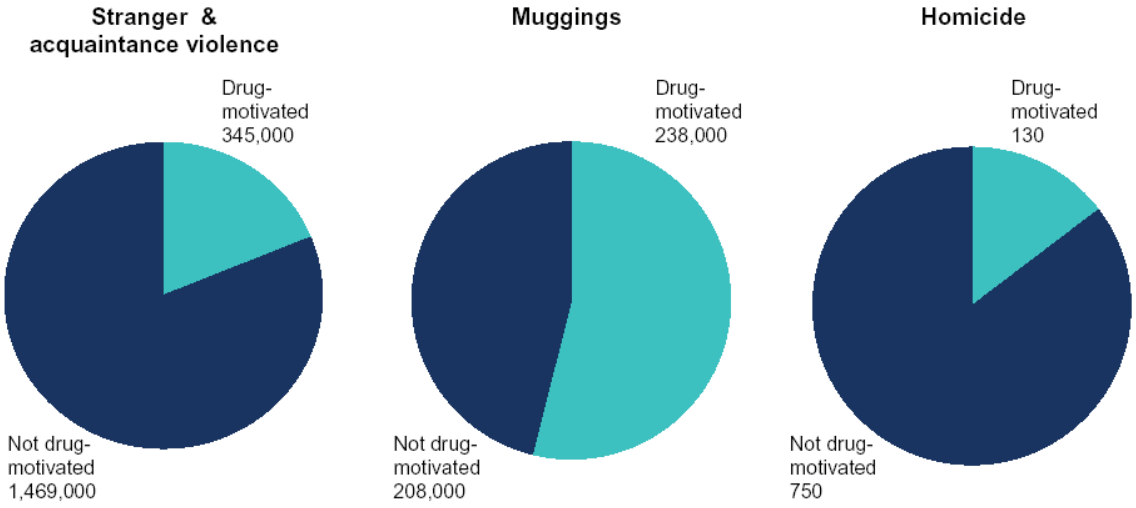
However, drug use is still linked to some violent crime, including ~130 homicides in a year

- While a lower proportion of drug-motivated crimes is high trauma than other categories of crime, a significant number of violent crimes are nonetheless associated with drugs



Sources: BCS 2001/2; NEW ADAM survey of arrestees 1999-2002; 'Crack and homicide in NYC 1988', P. Goldstein et al, 1989

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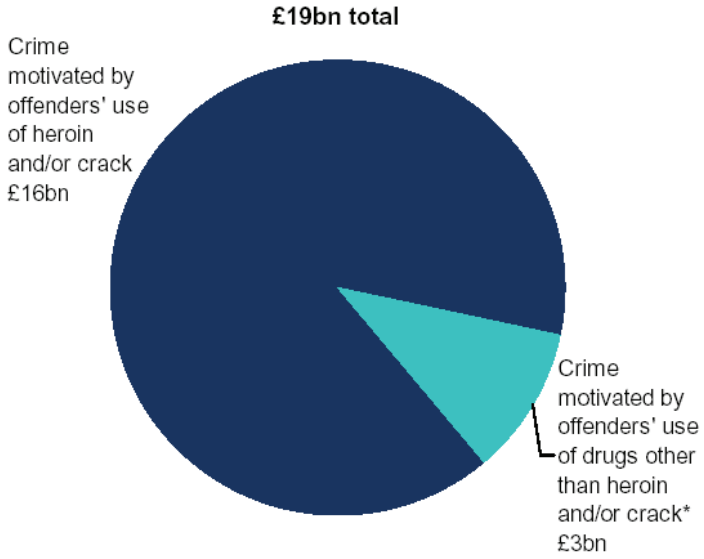
The 280,000 users of heroin and/or crack are responsible for the vast majority of the cost of drug-motivated crime

Cost of drug-motivated crime by drugs used



- 280,000 users of heroin and/or crack are responsible for 87% of the cost of drug-motivated crime
- Many heroin and crack users also take other drugs, but it is the use of heroin and crack that drives their criminal behaviour
- Very few people who only use cocaine commit crime as a result of their drug use

* Includes: amphetamines, cannabis, cocaine, ecstasy, LSD and methadone
Source: NEW ADAM, 'Economic and social costs of crime'

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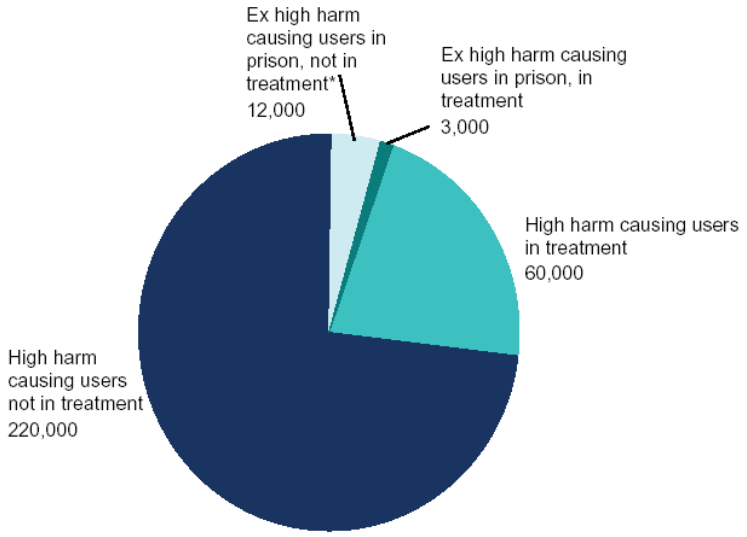
Drug use in the UK – Treatment Issues[97]

At any one time, over 220,000 high harm causing drug users are *not* engaged in treatment

Snapshot of high harm causing users' interaction with treatment



- Treatment outside prison can take place in the community or in residential settings
- Community interventions include methadone maintenance or weekly counselling
- Residential treatment includes detoxification and/or intensive counselling/therapy

* Included because a high proportion are likely to re-use on release
Source: Team analysis based on DH Treatment statistics, Home Office Prison statistics and Probation statistics, 2002

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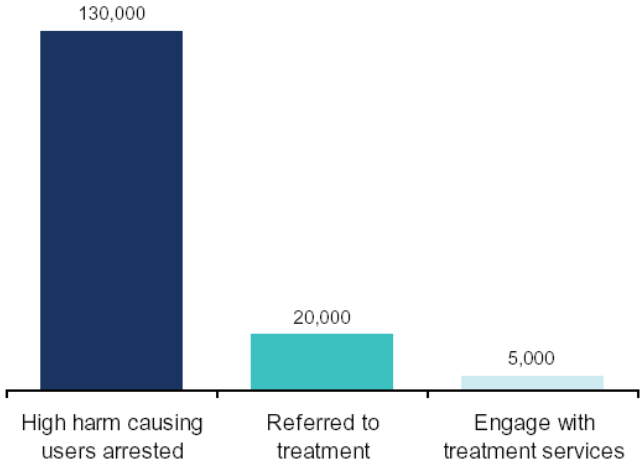
[97] All information in this handout is taken from The Strategy Unit Drugs Report: Phase I June 2003

Of high harm causing drug users arrested, less than 1 in 5 are referred to treatment - and less than 1 in 25 actually attend

High harm causing users referred to treatment through Arrest Referral



- Arrest Referral is an informal system which aims to identify drug users among arrestees and refer them to treatment
- Arrestees are assessed for drug dependence by interview
- Drug testing of those arrested for a 'trigger offence'* is currently being rolled out to 30 BCUs. It is intended to identify more users among arrestees, and identify users with greater certainty
- Currently there are no sanctions if the arrestee does not engage with treatment after referral. However, the Criminal Justice White Paper suggests that those not taking up treatment should not be bailed

* 'Trigger offences' are those typically linked to drug use, e.g. mugging, shoplifting, drugs offences, burglary
Source: Arrest Referral Statistical Update 2001

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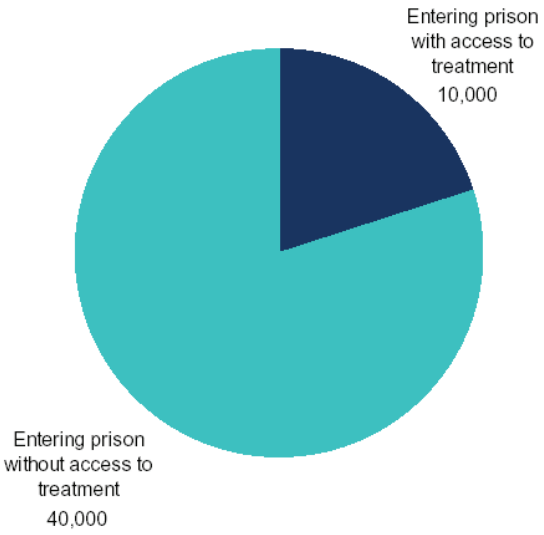
Of high harm causing users entering prison, a minority have access to specialised treatment

High harm users entering prison in a year with access to specialist treatment units



- Prisoners are assessed for health needs on arrival in prison, including drug problems
- Most high harm users are imprisoned for minor offences and short periods; as a result they are most likely to enter local prisons - which are less likely than higher security prisons to have specialist drug treatment services

Source: Team analysis, based on analysis for previous slide plus NAO and SEU Reducing Reoffending reports, 2002.

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Appendix 5. Drugs and Society

Outreach discussion guide

Introduction to group:

- Discussion today is part of a nationwide project, commissioned by the Academy of Medical Sciences (locations, website etc
- write-up url (www.drugsfutures.org.uk) and ask people to visit it if they have access to a computer – and tell their friends!
- Findings will be reported to the AMS working group, who will include them in their report to the government.
- Explain why the views of your particular group are so important to the project: eg, if it's parents, talk about the role of regulation in protecting young people; if it's users/recovering users, they will have particular insight into the impact of the way that regulation works, either because they've been involved with the criminal justice system or because it impacts on how they access drugs / the social networks they get involved with etc;

Introductions (5 mins)

- In pairs: get your partner's name and have a quick discussion about the first things that come into your head when you hear the word 'drugs'.
- Round the room: each person introduces their partner and their top-of-mind associations with 'drugs'. Explore anything interesting / unusual.

Focus of discussion: (5-10 mins)

- We're looking at knowledge about the brain and new drugs that might be developed in the future and how, as a society, we should regulate (or not regulate) drugs.
- Interested in your views of how effective the law is currently and whether there are other approaches we might take to regulating drugs than the one we use at the moment.

EMPHASISE: you don't need to know anything about the topic – don't need to know about drugs or about the law. We're interested in your views about how we, as a society, should respond to the new possibilities that science may give us in the future.

Questions?
Mobiles off.

Before we start discussion: Explain about workshop: give people the date: say you'd like to invite some of the people here today to the workshop and at the end of the discussion, after people have had time to check their diaries and think about it a bit, you'll put names in a hat (those who are available to come on the day) and draw names. (I suggest, if possible,

that you draw 7 names – some will probably drop out beforehand and if we're a few over, we can live with that. Mentioning incentives might help to encourage interest – but gauge this, as we don't want lots of fed-up people who wanted to come & wanted the money – this will depend on how many people in the group and what they seem like.

Changing attitudes (10 mins)

- How do you think our attitudes towards drug use will change in the future?
  - Explore: become more liberal/more restrictive; become more evidence-based; things currently legal becoming illegal; things currently illegal becoming legal

Looking into the future (20 minutes)
One of the possible developments for the future is a genetic test for addiction. If it happened, the test itself would only involve a blood test – so it wouldn't be very invasive or time-consuming. The results would probably only be able to tell you if you had a higher than average likelihood of becoming addicted to drugs. As far as we know at the moment, it wouldn't be able to tell you *how likely* you were to become addicted to a drug (if you tried it) – ie, it wouldn't be able to tell you had a 5% chance of becoming addicted or a 90% chance of becoming addicted.

What do you think the benefits of developing this kind of test would be?

FLIPCHART RESULTS

What do you think the disadvantages of doing this would be?

FLIPCHART RESULTS

If we developed this kind of test, do you think we should tell people what the results of the tests are? Why? Why not?
(Discussion)

If we knew how to develop a test for addition in the future, it might mean that we could also target people to block the effects of drugs – for example, we might be able to vaccinate children whose genes suggest they have a higher than average chance of addiction, or treat people who are currently addicts by giving them a vaccination or drug that stops them feeling the effects of a drug that they're addicted to.

If we were able to block the effects of drugs in this way, do you think we should do it? What would the benefits be? What would the disadvantages be? (Do both examples: vaccinating the child and using a blocker against existing addicts.)

Should it be compulsory for parents to have their child vaccinated if their your genes say the child us a potential addict? Should it be compulsory for existing addicts to be vaccinated? All? Just those who have become involved in crime? None? Why/Why not?

Limiting drug use (15 minutes)

- Over the centuries many people have used drugs for different reasons such as for enjoyment, for escape, or because they feel it helps them to be artistic or creative. What, if any, limits should we place on people's rights to enjoy drugs if they want to?

Wrap-up

- Review key points from discussion, eg:
  - attitudes will change in these ways;
  - these are the reasons we think people take illegal drugs;
  - benefits / disadvantages of developing genetic screening test
  - benefits / disadvantages of developing blockers – for all/just kids/just addicts/just criminals etc
  - limits on drug use

- Check group is happy with summary / doesn't want to add anything.
- Any more questions?

Ask people who have said they can come to the workshop to complete contact details form (get landline & mobile & email addresses, if possible). The organiser may wish to facilitate this process. Give them the details of the workshop and say that someone will contact them again next week to check that they're still ok to come, answer any questions etc.

In some groups (especially the user groups) it will be important to emphasise that we will not identify people attending the workshops – they will all just be 'general public'. We will not indicate who, amongst workshop participants, has been to a previous discussion, for example.

EVALUATION FORMS!

Workshop –Facilitators' Agenda

9.30 – 9.45 **As people arrive, they can sit anywhere they like.**

Facilitators: welcome people as they arrive, make sure they have coffee etc.

9.45–10.00 **Introductions**

Opening welcome (OPM)

- Thanks for coming
- Before giving you more information about what we're doing today, introduce AMS, who will give some background to the project

AMS representative

- Background to project
- How public engagement fits with other AMS work
- Importance of public views to the project
- What will happen to findings / timing of report

OPM:

- Brief overview of theme
- Agenda
- Business (fire escape/toilets/mobiles)

10.00-10.30 **Session 1**

Presentation: From 1987 – 2027 – changing views and changing possibilities

ppvote session
OPM explains reason for vote / repetition at end of day, when results will be shown
Questions (following warm-up):

On which of the following areas do you think it is most important for scientific research to focus on in the future?

1. Developing new treatments for depression
2. Developing new treatments for Alzheimer's Disease
3. Developing new treatments to prevent addiction to drugs
4. Developing new treatments for people already addicted to drugs
5. Other

Which of the following would most benefit the way we approach mental health in the future?

1. Removing the stigma attached to mental health problems
2. Developing new drug treatments for mental health problems
3. Developing other new treatments for mental health problems (e.g. counselling, other treatments, support etc.)
4. Other

Here are six factors which might make a young person more vulnerable to illegal drug use. Please rank these in order of importance

1. Having suffered from child abuse

2. Having parents who use drugs
3. Genetic make-up
4. Mental Health problems
5. People using drugs in the neighbourhood
6. Peer pressure

If we could develop a drug which prevents addiction given these options do you think we should make it…?

1. compulsory for everyone
2. Compulsory for those deemed to be at risk of addiction
3. Available only on prescription
4. Available over the counter for adults to choose to buy for own use
5. Available over the counter for adults to give to their children
6. Illegal to make or use
7. Not sure

Which of the following would be of most benefit to the way we approach drug addiction in the future?

1. Vaccinating all babies to prevent addiction
2. Targeting social resources at young people whose family background or environment makes them more likely to use or become addicted to drugs
3. Targeting social resources at all young people regardless of their family or environment
4. Other

Which of the following statements do you agree with..?

1. Adults should legally be allowed to take any drugs they want
2. Adults should legally be allowed to take some of the drugs that are currently illegal
3. All use of drugs for non-medical reasons should be illegal

10.30–11.00 **Introduction to the issues**

In small, facilitated groups:

Attitudes towards mental health and addiction:

- Which do you think is the most harmful to the individual? Why?
- Which do you think is most harmful to society? Why?

Explore attitudes towards different mental health problems:

- Alzheimer's Disease / dementia: what are the associated problems (explore impact on individual, changing demographics – eg, older carers; fewer young workers (tax implications);
- Depression: views on seriousness of depression; different levels of depression;

Attitudes towards people with mental health problems using illegal drugs to self-medicate.

Facilitators: by end of session, you should have:

- Overview of group's attitudes to the above, with key points
- List of questions/issues raised by discussion

11.00–11.15 BREAK

11.15–12.00 **Providing the background – scenarios and briefing notes**
Small group work – 4 facilitated groups.

Facilitator reads the scenario to the group: brief discussion of initial responses.

Facilitator reads through briefing notes with group: brief discussion of initial responses: anything seen as particularly relevant to the scenario.

Opening question (these are primarily for warm-up, but will be reviewed in the plenary, when people can add comments).

- What do you think Nadine and Cameron should do? Are there any other choices available to them than those offered in the scenario? What do you think the implications of either choice might be?

Facilitator: explore reasons for different views – focus on how views might change in the future.

12.00–12.30 Each group feeds back key points from discussion (10 minutes)

General discussion about issues raised (with focus on future).
Questions raised in 10.30-11.00 slot to be answered in this session, if possible. If not, questions to be posted for experts arriving in the afternoon.

12.30–13.15 Lunch

13.15 -13.45 **Exploring the issues**
Facilitator:
Provide question sheets to group – ensure everyone is clear about what is being asked:

Explore changing social attitudes that might make Nadine and Cameron's views different to those we have now – eg, society has become more used to genetic technology; Use briefing notes / information sheets where relevant.

This information to be pasted on the sticky wall (or flipcharted if sticky walls not possible).

Experts: where you have relevant information that might help participants, please feel free to contribute, or ask participants questions. Where you have information about possible future direction (eg, of science or policy in this area, what we've tried that isn't working – eg, education), this is especially useful.

Facilitator to help group relate existing knowledge to the question.

13.45 – 14.45 **Answering the questions and presenting the outputs**

Taking each question in turn, discuss issues. **(Facilitators: please challenge/play Devil's Advocate.)** Focus on: anything on which there is clear agreement or disagreement (if someone is offering different views, make sure these are explored).

Ask for a volunteer to write down questions that arise in the discussion. (facilitators can come up with these too, if you think further information would help). **ASK FOR A VOLUNTEER TO DO FEEDBACK AT END OF DISCUSSION.**

Experts in each group: please spend about 10 minutes with each group and then rotate. This will help to ensure that all tables get some additional insight into the issues.

In final 15 minutes:

- Facilitator: help team to put together a presentation on their discussion findings:
    - Presentations should include the questions being addressed, their answers to the questions and the reasons for their answers
    - Decide on who is going to do the presentation (could be the whole group)

14.45 – 15.00 **BREAK**
(Any new ppvote questions to be entered at this point)

15.00 – 15.30 **Each group presents their findings.**

15.30 –16.00 **Questions and discussion**
By close of discussion, we should have:

1. Clear and agreed responses to each of the scenario questions
2. Recommendations for action (eg, policy changes; support that should be developed; medical treatment; where more research might be done)

16.00 - 16.15 Closing ppvote / view results from morning vote;

16.15–16.30 Thanks & close (from OPM & WG member/AMS)
Evaluation questionnaires & incentives

Group 1 Questions

- What, if any, benefits would there be in developing genetic tests for addiction?
    - If a test was developed and we decided it should be introduced, should everyone be made to take it?

- If not, how would we decide who *should* take it?
- What might be the disadvantages of such a test (to the individual? To their family? To wider society?)

Group 2 Questions

- What is the difference between being told you have a gene that makes you more likely than other people to become addicted to drugs, and being told that your environment makes you more likely to become a drug user?
  - How do you think an individual would respond to being told they had a genetic predisposition to addiction?
  - What could we do to help ensure that person didn't become a drug user?
  - How do you think an individual would respond to being told their environment made them more likely than others to become a drug user?
  - What could we do to help ensure that person didn't start to use drugs?

Group 3 Questions

- Do you think it is better that brain scientists focus their efforts on developing drugs to treat mental health problems or on finding ways to prevent and treat addiction? Why?
  - If we focused on treatments for mental health, what do you think the impact might be on drug addiction?
  - Are there any particular mental health problems we should focus on? eg, problems associated with ageing – Alzheimer's/dementia; schizophrenia? Depression?

Group 4 Questions

- Over the centuries many people have used drugs for different reasons such as for enjoyment, for escape, or because they feel it helps them to be artistic or creative. What, if any, limits should we place on people's rights to enjoy drugs if they want to?
  - What do you think society would lose anything if no one took drugs in the future?
  - What do you think society would gain if no one took any drugs in the future?
  - Where do you think the limits are to people's rights to take drugs?

Workshop – Participants' Agenda

9.45–10.00 **Introductions**

Welcome and background to *Drugsfutures*

- Diane Beddoes
- Robert Frost, Academy of Medical Sciences

10.00-10.30 **Your views on drugs and drug use**
Voting session

10.30–11.00 **Looking at the issues**
Small group discussion on drug use in the UK

11.00–11.15 BREAK

10.30–11.00 **Looking at the issues**
Small group discussion on drug use in the UK

11.00–11.15 BREAK

11.15–11.45 **Nadine and Cameron have a difficult decision – one possible future**
Small group discussion of the issues raised in the scenario

12.00–12.30 **Feedback on discussion**
Plenary session

12.30–13.15 LUNCH

13.15 -13.45 **Looking at the future – changing social attitudes**

13.45 – 14.45 **Looking at the future – recommendations for our future society**

14.45 – 15.00 **BREAK**

15.00 – 15.30 **Presentation of findings**
Four group presentations addressing the key questions

15.30 –16.00 **Questions and discussion**
Agreeing on the issues
Recommendations for action

16.00 - 16.15 **Your views on drugs and drug use**
Second voting session

16.15–16.30 Thank-you and close

Completing evaluation questionnaire
Collecting ‘thank-you’ envelope

Scenario

A possible future…
The year is 2025, and Nadine is worried.

Why is everything so complicated? It is not as if the whole thing is terribly new. It was in the early years of the century that science unravelled the genes that might point to someone becoming an addict. What scientists can't do is help you make sense of it all.

She and Cameron are planning on starting a family, so a trip to the gene adviser was the responsible thing. Who knows what might be lurking? Nadine's mother likes a drink. Her father liked less legal sorts of chemical use, sometime in the distant past, or so he says. There are even stories that relatives smoked, years ago. What about Uncle Alex, who lost the family business in a card game?

All the gene adviser would say was that Nadine has genes for potential addiction, but Cameron does not, at least not so many. The gene adviser said that this was about possibilities and statistics, not anything definite. Which of Cameron's genes and which of Nadine's the baby would end up with is guesswork or like a lottery.

Should they still go ahead? Is there an anti-addiction pill the child might take? How can they keep their child away from all the bad influences there are out there? And anyway, is it so terrible if someone likes the odd drink? Sometimes she wishes they could just have the baby, without all these worries before it has even arrived. People managed to reproduce for thousands of years without all this stuff, after all.

Questions

- What, if any, benefits would there be in developing genetic tests for addiction?
- What is the difference between being told you have a gene that makes you more likely than other people to become addicted to drugs ,and being told that your environment makes you more likely to become a drug user?
- Do you think it is better that brain scientists focus their efforts on developing drugs to treat mental health problems or on finding ways to prevent and treat addiction? Why?
- Over the centuries many people have used drugs for different reasons such as for enjoyment, for escape, or because they feel it helps them to be artistic or creative. What, if any, limits should we place on people's rights to enjoy drugs if they want to?

Briefing notes: Drugs and society

The range of drugs consumed in society has been increasing and drug use is set to grow more in coming decades. The personal, social and financial costs of this growth are potentially very large. Social attitudes to drug use are also likely to change if it becomes more widespread. Some people may accept this growth and be tolerant of it. Others will view it negatively.

Risk factors

Much is now known about some of the factors that increase the risk of drug use, particularly problem use. A lot of problem drug use is associated with social deprivation. However, people in all walks of life use a range of drugs, from caffeine, nicotine and alcohol to cannabis, cocaine and heroin.

Having parents who use drugs appears to be a factor in problem drug use – though there is controversy over why.

- Is it because of social factors – for example, growing up in an environment and mixing with people who see drug use as normal and acceptable?
- Or is it because of genetic factors – that means, is it inherited?
- Or is it a mixture of genetic and social factors?

Attitudes towards drug use

The attitudes of society towards drugs can change over time. Our views on any particular drug and the way we treat people who use it are only partly related to the physical effects and harms of that drug. Our views are also shaped by how we see the people who use particular drugs. For example, morphine and cocaine were originally regarded as treatments for other diseases and as alternatives to more damaging forms of drug use. In the 19th century, the use of opiates (heroin and morphine are opiates) by the rich was seen as much less of a problem than their use by Chinese dock workers in east London or by working class English people.

Attitudes towards smoking changed dramatically over the 20th Century. In part, these changes may be a consequence of understanding addiction as an illness rather than a moral failing. It will be interesting to see how smoking bans, education and nicotine replacement therapies affect our views in the future.

Drugs and society – The future

Over the next 20 years we could grow more tolerant of drugs which are illegal today, such as heroin and cocaine. Over the past 20 years, for example, we have become more tolerant of marijuana (cannabis), as can be seen from changes in the penalties associated with its possession.

What might be the effects of increased tolerance of drug use?

- If drugs are more common, they may not be such an enticing form of rebellion for young people
- The very large problems associated with much drug use could cause a backlash, with a large part of the population finding them repugnant
- In the future, detecting whether or not someone has taken drugs may be easier. We might not even need to have direct physical contact with the person being tested. This would make it easier to clamp down on drug use. This might be regarded as worthwhile. Or it might be seen as an attack on people's civil liberty. People's views will depend in part on whether they think that the wider social cost of drug use is excessive.

Future treatments

Some drug use is not seen as a problem and does not require treatment. As the example of smoking shows, our views of which drug use needs treatment change. The trend is for drug use that *does* require treatment to involve a 'wrap around' approach. That is, it will include housing, education and employment as well as social and medical care.

Harm reduction

'Harm reduction' refers to policies, programmes, services and actions that work to reduce the health, social and economic harms to individuals, communities and society that are associated with the use of drugs. In the future, this could include Safe Injecting Rooms for drug users

Such services may become more individualised as different drugs develop and people use more than just one drug. People who use drug services may become more demanding too, as they grow in number and there is less stigma attached to using drugs.

New technology may produce new treatment drugs or anti-drug vaccinations. These may be harmful in their own right or may become new drugs of dependency or abuse.

Appendix 6. Drugs for a smarter brain

Outreach discussion guide

Introduction to group:

- Discussion today is part of a nationwide project, commissioned by the Academy of Medical Sciences (locations, website etc
- write-up url (www.drugsfutures.org.uk) and ask people to visit it if they have access to a computer – and tell their friends!
- Findings will be reported to the AMS working group, who will include them in their report to the government.
- Explain why the views of your particular group are so important to the project: eg, if it's parents, talk about the role of regulation in protecting young people; if it's users/recovering users, they will have particular insight into the impact of the way that regulation works, either because they've been involved with the criminal justice system or because it impacts on how they access drugs / the social networks they get involved with etc;

Introductions (5 mins)

- In pairs: get your partner's name and have a quick discussion about the first things that come into your head when you hear the word 'drugs'.
- Round the room: each person introduces their partner and their top-of-mind associations with 'drugs'. Explore anything interesting / unusual.

Focus of discussion: (5-10 mins)

- We're looking at knowledge about the brain and new drugs that might be developed in the future and how, as a society, we should regulate (or not regulate) drugs.
- Interested in your views of the issues that might arise in the future in relation to a new class of drugs being developed, called cognition enhancers – will explain a bit more about this kind of drug

EMPHASISE: you don't need to know anything about the topic – don't need to know about drugs or about the law. We're interested in your views about how we, as a society, should respond to the new possibilities that science may give us in the future.

Questions? Mobiles off.

Before we start discussion: Explain about workshop: give people the date: say you'd like to invite some of the people here today to the workshop and at the end of the discussion, after people have had time to check their diaries and think about it a bit, you'll put names in

a hat (those who are available to come on the day) and draw names. (I suggest, if possible, that you draw 7 names – some will probably drop out beforehand and if we're a few over, we can live with that. Mentioning incentives might help to encourage interest – but gauge this, as we don't want lots of fed-up people who wanted to come & wanted the money – this will depend on how many people in the group and what they seem like.

Changing attitudes (10 mins)

- How do you think our attitudes towards drug use will change in the future?
  - Explore: become more liberal/more restrictive; become more evidence-based; things currently legal becoming illegal; things currently illegal becoming legal
- (ADHD parents in particular) – explore effects of drugs used by their children (find out what they are, if people ok to talk about it); nature of improvements. (DON'T WANT TO FOCUS TOO MUCH ON THIS – BUT PEOPLE MAY NEED TO DOWNLOAD THIS STUFF FIRST)

Introducing cognition enhancers (15-20 mins)

Most of us use cognition enhancing substances – things that make us better at concentrating or taking in or organising information – things like caffeine or herbal stimulants like ginko biloba, We're also used to enhancing our cognition through conventional means such as education and training, meditation, memory training, learning to see patterns in things (eg, maths, grammar).

(Make sure people understand what cognition means – knowledge, understanding, making judgements etc.)

Over the past few years, a new class of drugs called 'cognition enhancers' has emerged which lead to the prospect of more effective cognition enhancers – or 'smart pills'. These work in a number of ways and can have a range of effects. For example, they might improve someone's concentration; or they might improve their memory; or they might encourage wakefulness. This kind of drug is at the moment used to treat children and adults who have ADHD, under the brand name Ritalin and people with Alzheimer's disease, under the brand name Modafinil. These drugs are being quite widely used amongst students in private school in the US and UK students are already using Ritalin to help them with exams. This is why it is important for us to think of some of the issues that we may have to address in the future.

The development of cognition enhancers is targeted at four main groups

- dementia
- 'normal' ageing
- cognitive impairment (eg, forgetfulness, confusion)
- 'beyond therapy' uses – that is, use by healthy people who might want to benefit from the ability of a substance to improve their cognition in some way.

(If people ask about side-effects: At the moment, research on healthy volunteers suggests that side-effects are minimal but we don't know what the long-term consequences of use might be.)

Explore views on use of cognition enhancers for the first 3 groups (fairly quickly);

- eg, Issues around longer life for people with eg, Alzheimer's – how do we measure the length of someone's life in relation to the quality of that life – eg, could have improved cognitive functioning but be physically decrepit

Changing attitudes towards medicine? (15-20 mins)
Focus on 4th use, by healthy people who might want to benefit in some way from the use of these drugs. This use raises questions about what we think the purpose of drugs is. Cognition enhancers offer the possibility that we can improve the normal functioning of our brain.

- General discussion over views of whether it is appropriate for people to take drugs to improve them, when they're not ill
  - ie, should we think about medicine as a way of enhancing normal people's abilities as well as a way of treating people's health problems?

OVERVIEW OF ATTITUDES TOWARDS COGNITION ENHANCERS FOR GENERAL USE (ie, by health people)

- **START WITH POSITIVES (if necessary, prompt)**: FLIPCHART RESPONSES. SEPARATE FLIP FOR NEGATIVES

For positives and negatives:

- Go through each point and explore if they think these would be positive/negative for everyone – eg, people of different ages; people in different jobs (eg, if you're a pilot / soldier, should you be allowed to take them to stay awake; should you be allowed to take them if your job involves a lot of concentration?
- Explore:
  - What do people see as the difference between taking a cognition enhancer and other conventional means of cognition enhancement – caffeine, education etc?
  - What would be the benefits to society as a whole if we could take a pill that meant we didn't have to spend years in expensive education? Eg, would it lead to things being more equal, because people might have a cheap alternative to having to pay for university? Or might we start to make a distinction between what we might call 'natural' or 'authentic' intelligence – ie, result of conventional enhancement – and 'unnatural' or 'inauthentic' intelligence – ie, result of using cognition enhancing drugs?

- We used to think it was normal for people to have bad teeth but now we know how to improve dental health. Do you think the same changes in attitude might happen in the future, in relation to our intelligence?

How should society respond in the future?

- How do you think society should respond if the numbers of people taking cognition enhancers continues to increase?
  - What do you think might be the effect? Positive? (Increased competitive advantage – economic benefits? Relationship of intelligence to behaviour / mood?) Negative? (Ritalin already being used in the US to control 'unruly' children.)
- How do you think we should regulate the use of cognition enhancers – both for people with ADHD and for people who we think of as 'normal'?
  - (PROBE if necessary: Testing in schools? By employers? To show that you haven't used them – or to prove that you have used them?

Wrap up:

Review findings:

- Changing attitudes towards drugs
- Use of cognition enhancers for people with some kind of cognitive impairment/deficit
- Use of cognition enhancers by healthy people
  - primary positives and negatives
  - difference between taking a pill and conventional enhancement
  - how attitudes towards this use might change in the future
- How should society respond in the future if use of cognition enhancers continues to increase?
- Regulatory issues

Any final questions?

Return to workshop issue: ask who can come and get contact details (get landline & mobile & email addresses, if possible). Give them the details of the workshop and say that someone will contact them again next week to check that they're still ok to come, answer any questions etc.

In some groups (especially the user groups) it will be important to emphasise that we will not identify people in any way those who attend the workshop – they will all just be 'general public'. We will not indicate who, amongst workshop participants, have been to a previous discussion, for example.
EVALUATION FORMS!

Workshop – Facilitators' Agenda

9.45 – 10.00 **Introductions**

Welcome and background to *drugsfutures*

10.00-10.30 **Your views on drugs and drug use**

OPM explains reason for vote / repetition at end of day, when results will be shown
Questions (following warm-up)

Which one of the following do you consume most frequently?
1. Tea or coffee
2. Red bull or similar
3. Pro-Plus (caffeine pills)
4. None of the above

Which of the following do you think is the most effective way to maintain a healthy brain?
1. Memory tests
2. Puzzles
3. Take cod liver oil
4. Take regular exercise
5. None of the above

If you could buy a pill over the counter that helped you to overcome the effects of normal ageing on your memory, would you take it? (e.g. something that would help you remember where you had put your keys)
1. Yes
2. No
3. Don't know

If a pill as safe as aspirin was developed that improved your ability to solve problems would you take it?
1. Yes
2. No
3. Don't know

In the future in which of the following jobs would it be most acceptable to take drugs (as safe as aspirin) to improve concentration?
1. Train driver
2. Surgeon
3. Politician
4. Teacher
5. Policeman
6. Nuclear power station operator
7. Soldier
8. All of the above
9. None of the above

When developing pills to improve problem solving skills, which of the following groups should scientists prioritise?

1. Children and young people with ADHD
2. Older people with Alzheimer's disease / dementia

Do you think it is acceptable for healthy young people to take drugs (as safe as an aspirin) to improve problem solving skills and concentration?

1. Yes
2. No
3. Don't know

Do you think it is acceptable for healthy adults to take drugs (as safe as an aspirin) to improve problem solving skills and concentration?

1. Yes
2. No
3. Don't know

Do you think it is acceptable for older people with Alzheimer's disease / dementia to take drugs to improve problem solving skills and concentration?

1. Yes
2. No
3. Don't know

Do you think it is acceptable for young people with ADHD to take drugs to improve problem solving skills and concentration?

1. Yes
2. No
3. Don't know

10.30–11.00 **Introduction to the issues**

Introductions in small groups – round table: each person to introduce their neighbour and have brief discussion about how they responded to the idea of the kind of drug mentioned in the voting (ie, drugs to improve concentration/memory)

Brief discussion:

- Explore whether people have heard of drugs that can help people with memory and concentration and context for this, if they are aware of them – eg, use for people with Alzheimer's Disease or dementia; use by children with ADHD.

What are your views on these drugs?

- EXPLORE: use by people with identified problems (as above); use by 'healthy' individuals – eg, what's the difference between taking a 'smart pill' and paying for a tutor. If you couldn't afford to pay for a tutor for your child but could get a 'smart pill' cheaply at the chemist, that was relatively safe for your child to use, would you give it to your child?

How do you think our attitudes will change in the future?

- EXPLORE: more competitive educational / work environment; people becoming more used to using drugs for a wider range of purposes? More knowledge of the brain meaning we are able to design better drugs with more specific effects?

Overview of group's attitudes to the above, with key points

- IMPORTANT: Start to develop a list of factual information that participants feel would help them to think about these issues. Explain experts will be coming in the afternoon and we want to make the best use of their knowledge that we can.

11.00–11.15 BREAK

11.15–12.00 **Providing the background – scenarios and briefing notes**
Small group work – 4 facilitated groups.

Facilitator reads the scenario to the group: brief discussion of initial responses.

Facilitator reads through briefing notes with group: brief discussion of initial responses: anything seen as particularly relevant to the scenario.

Opening question (these are primarily for warm-up, but will be reviewed in the plenary, when people can add comments).

What are your views on Jake's situation? Do you think this is a possible future? What do you think is good about it? What do you think is bad about it? Would you respond differently if he was, for example, a construction worker or a teacher or a pilot?

Facilitator: explore reasons for different views – focus on how views might change in the future.

12.00–12.30 Feedback & plenary

12.30–13.15 Lunch

13.15 -13.45 **Information gathering session**
Small group work – exploring the issues: 4 facilitated groups:

Introduce the question(s) for your group.

What information would we like from the experts to help us answer this question?

Write questions on red cards: post these up in your corner.

Experts: please look at the red cards and decide between you who is going to respond to which question.

13.45–14.15 **Expert panel / Question and answer session**

Experts provide responses to questions.

Open question and answer session.

14.15 – 15.00 **Answering the questions and presenting the outputs**

Further discussion and development of response and recommendations.

ASK FOR A VOLUNTEER TO DO FEEDBACK AT END OF DISCUSSION.

Experts: please circulate round groups, rather than staying with one group, to ensure that all participants have access to your expertise.

Facilitator: help team to put together a presentation on their discussion findings:

Presentations should include the questions being addressed, their answers to the questions and the reasons for their answers

Decide on who is going to do the presentation (could be the whole group)

15.00 – 15.15 **BREAK**

15.15 – 15.45 **Each group presents their findings in turn**

Followed by question and answer session: facilitators and experts to ask groups what issues they discussed, what they think are the common points across all the four groups.

By end of session:
1. Clear and agreed responses to each of the scenario questions
2. Agreed recommendations across all participants (eg, policy; support that should be developed; medical treatment; research priorities)

15.45 –16.00 Closing ppvote / view results from morning vote

16.00 - 16.30 Thanks & close (from OPM & WG member/AMS)
Evaluation questionnaires & incentives

Group 1 Questions

Should EVERYONE be allowed to use cognition enhancers, or should they be regulated for use by people with particular jobs? (This assumes that they are safe.)

- What might be the impact on society if everyone was allowed to use cognition enhancers (eg, if they were available over the counter at the chemist)?

- If you wanted to restrict them to people doing particular jobs, what sorts of jobs would these be?

We already enhance our immune systems by using vaccines. Is there any difference between doing this and taking a pill or using a drink that enhances our ability to think?

We already improve our cognition through education and other means. What is the difference between doing this an taking a pill that performed the same function?

If we were able to take cognition enhancers, do you think we would helping ourselves to realise our full potential or changing our personal identity?

Group 2 Questions

Do you think that children and young people should be allowed to use cognition enhancers in the future– for example, to help with exams or interviews? Why – or why not?

On average, people who have higher educational qualifications earn more over their lifetime than people who don't have them. As education gets more expensive, do you think it will help?

If we found that people with lower levels of performance in tests such as problem-solving were helped more than people with higher levels of performance, should we make 'smart pills' available to people on the basis of this kind of test?

Group 3 Questions

If cognition enhancers become widely used by adults, young people and children in the future, should employers and schools be allowed to test their employees or students to check if they are using them? Why – or why not?

If you got your job by using a cognition enhancer, should you be required to carry on taking it.

Should cognition enhancers be used only for people in particular jobs?

If students are persistently unruly or difficult, should cognition enhancers be an option for ensuring that there is order in the classroom?

Group 4 Questions

Cognition enhancers can also be used to treat diseases associated with ageing, such as dementia and Alzheimer's Disease. This will mean there are more older people in society who are mentally alert.

What might be the issues of balancing mental well-being with the physical effects of ageing?

What is the difference between enhancing your body so that it looks younger (eg, cosmetic surgery, botox etc) and enhancing your brain so that it performs better? Is one more acceptable than another?

Workshop - Participants' Agenda

9.45 - 10.00 **Introductions**

Welcome and background to *drugsfutures*

10.00 - 10.30 **Your views on cognition enhancers**

Voting session

10.30 - 11.00 **Looking at the issues**
Small group discussion on drug use in the UK

11.00 – 11.15 BREAK

11.15 – 11.45 **Jake's new job – a possible future**
Small group discussion of the issues raised in the scenario

11.45 – 12.00 **Feedback & plenary**

12.30 – 13.15 LUNCH

13.15 - 13.45 **Information gathering session**
Exploring cognition enhancers

13.45 - 14.15 **Expert panel**
Question and answer session

14.15 – 15.00 **Developing responses and recommendations**
Responding to the questions

15.00 – 15.15 **BREAK**

15.15 – 15.45 **Presentations**
Small group presentations

15.45 – 16.00 **Your views on cognition enhancers**
Second voting session

16.00 - 16.30 Thanks & close (from OPM & WG member/AMS)
Evaluation questionnaires & incentives

Scenario

A possible future….
The year is 2025, and Jake is miserable.

He thought that once he got qualified, he could be himself. As his parents said, the pills he took at school and college might make him feel a little odd, but they had all been tested. They were bound to be better for you than the coffee people use to get going in the morning or the wine they drink for fun. As his mother said, everything from chocolate to sugar affects your brain. Why not get the result you want?

The problem is that his new job at 24/7 Consulting has a strict code of drug testing. He has worked hard to get here, passed every exam and built up interests to make sure he could look rounded at the interview. But if they take a blood sample on Monday – and they will – it will all be over, unless he has recent traces of the right cognition enhancers in his bloodstream.

He asked about this at the interview. As he pointed out, he's an engineer, not an astronaut or a nuclear power station operator. He can see that they have to be on top form every second they are at work, just like a bus driver. But he is designing machines, not running them. So what if he works a bit slower than he might without drugs?

But the firm was insistent. After all, he had got that degree with his brain enhanced. Why would they employ him in a less capable state? What if he designed something, it broke, the firm was sued, and it turned out in court that it had been designed by someone not operating at full speed? He couldn't take the chance.

Questions

- Should EVERYONE be allowed to use cognition enhancers, or should they be regulated for use by people with particular jobs?
- Do you think that children and young people should be allowed to use cognition enhancers in the future– for example, to help with exams or job interviews? Why – or why not?
- If cognition enhancers become widely used by adults, young people and children in the future, should employers and schools be allowed to test their employees or students to check if they are using them? Why – or why not?
- Cognition enhancers can also be used to treat diseases associated with ageing, such as dementia and Alzheimer's Disease. This will mean there are more older people in society who are mentally alert. What might be the issues of balancing mental well-being with the physical effects of ageing?
- At the moment, we tend to think of drugs as something that we take to treat health problems. Do you think that it is acceptable to take drugs for lifestyle reasons – for example, for clubbers to stay awake? Why – or why not?

Briefing notes: Drugs for a smarter brain

What if the brain power we are born with, and develop through our growth and education could be improved by taking the right drugs? This is the potential of cognition enhancers. They could help ease mental decline in elderly people or improve speed of thought in healthy people.

COGNITION: Knowledge. Understanding. Activity of the brain including understanding things, comparing them, making judgements.

The term 'cognition enhancer' is used to refer to a number of products. Research has found that these products have four main targets:

- dementia
- 'normal' ageing
- cognitive impairment (eg, forgetfulness, confusion)
- 'beyond therapy' uses – that is, use by healthy people who might want to benefit form the ability of a substance to improve their cognition in some way.

How do they work?

Cognition enhancers work in a number of ways.

- As people age, forming the pathways in the brain across which information travels becomes more difficult. The pathways that are already there grow weaker. This is why older people learn more slowly. Some cognition enhancers reinforce or maintain particular pathways
- In some degenerative diseases, such as Alzheimer's, brain cells die more quickly. Some cognition enhancers aim to slow brain cell death

Drugs are not the only way to maintain or perhaps improve brain function. Physical and mental exercise, and good diet, are also recognised as being a positive influence, especially in slowing normal ageing

Have you used cognition enhancers?

Many people with normal cognition functions use cognition enhancers. For example, caffeine and nicotine. Many herbal remedies and food supplements such as vitamins are claimed by some people to help immediate and long-term memory. Some have been shown to be effective in formal trials

Drugs for a smarter brain – the future

As we learn more about how the brain works, we will discover new ways in which to enhance cognition. Some of these ways might involve surgery, rather than drugs. Physical and mental exercise and diets that might enhance mental performance are also likely to grow more popular.

Some of the questions we will need to consider

Our attitudes towards the purpose of medicines might change. At the moment, we see medicinal drugs as something taken to cure an existing health problem. In the future, perhaps we will accept drugs as something taken to improve someone's 'normal' functions.

As we learn more about the brain and get better at targeting drugs, we may start to see 'healthy' people believing they have a condition that needs treating.

We may have to consider the balance of benefits and disadvantages. For example, some cognition enhancers, such as amphetamines, encourage wakefulness. But they might also make people more impulsive and lead them to make poor decisions.

Something to think about

If cognition enhancers are used by people who have diseases such as Alzheimer's, they might lead to a longer life. This leads to the question of how much should we take into account the *quality* of that person's life as well as how long it is?

We might also need to think about 'pushy parents' too? Some parents might feel that it is OK to give a cognition enhancer to their child, if it means they do well at school. Some schools might think that allowing their pupils to take cognition enhancers will produce better results and push them up the league tables. You might want to think about what the difference is between a parent allowing their child to take cognition enhancers (providing they do no harm) and a parent sending their child to a tutor.

Examples of cognition enhancers

- **Caffeine** and **nicotine** can help concentration.
- **Ritalin** is prescribed for sufferers of Attention Deficiency Hyperactive Disorder (ADHD), as it helps them to concentrate better
- Some scientific trials report that **Vitamin B6** may benefit memory
- Some scientific reviews report that **St John's Wort** may be effective for the short-term treatment of mild to moderately severe depression

Appendix 7. Drugs and young people

Outreach discussion guide

Introduction:
Our discussion today is part of a nationwide project, commissioned by the Academy of Medical Sciences (locations, website etc – write-up url (www.drugsfutures.org.uk) and ask people to visit it if they have access to a computer – and tell their friends! Findings will be reported to the AMS working group, who will include them in their report to the government.

Introductions (5 mins)
Before I explain a bit more about the project, we should introduce ourselves.

In pairs: get your partner's name and have a quick discussion about the first things that come into your head when you hear the words 'young people' and the word 'drugs'.

Round the room: each person introduces their partner and their top-of-mind associations with 'young people' and 'drugs'. Explore anything interesting / unusual.

Focus of discussion: (5-10 mins)
We're looking at knowledge about the brain and the particular issues relating to young people and drug use. We're interested in your views on some of the issues that we, as a society, will need to think about in relation to these developments and how they might impact on the way in which we approach young people's use of drugs – both legal and illegal. For example: we've learned quite recently that young people's brains continue to develop until they're in their mid-20s.

EMPHASISE: you don't need to know anything about the topic – don't need to know anyone with a mental health problem or have had one, or know anything about the science – that's the expert's job. We're interested in your views about how we, as a society, should respond to the new possibilities that science may give us in the future.

Questions?
Mobiles

Before we start discussion: Explain about workshop: give people the date: say you'd like to invite some of the people here today to the workshop and at the end of the discussion, after people have had time to check their diaries and think about it a bit, you'll put names in a hat (those who are available to come on the day) and draw names. (I suggest, if possible, that you draw 7 names – some will probably drop out beforehand and if we're a few over, we can live with that. Mentioning incentives might help to encourage interest – but gauge this, as we don't want lots of fed-up people who wanted to come & wanted the money – this will depend on how many people in the group and what they seem like.

Opening discussion

- FLIPCHART: NAME ALL THE DRUGS YOU CAN THINK OF THAT AFFECT PEOPLE'S BRAINS

- Which of these drugs do you think it is most important for people to avoid?
    - Why?

- What are your views on people taking drugs?
    - Eg, why they take them (explore issues around experimentation / mental health problems / family background etc, but don't prompt too much at this stage)

- Do you think we take a different approach to young people who take drugs than the approach we take to older people who take drugs?
    - Why / why not? Why is it important to take a different approach (if they think it is!)

Our approach to drug use

- How would you describe the approach society currently takes towards young people's drug use?
    - Educational? Health-focused? Law focused?)

- How successful do you think this approach is?
    - Why is it successful / unsuccessful?
    - What else would you like to see happening in the future?

  (FACILITATOR; IF PEOPLE SAY 'MORE EDUCATION' LET THEM KNOW THAT EDUCATION AND INFORMATION APPEAR NOT TO BE WORKING and explore their views on why this might be and what else might help.)

Identifying vulnerable young people

- Some young people will use recreational drugs for a short time and then stop using them, whilst others will use them and go onto taking stronger drugs or become an addict
    - Do you think there are any ways we can identify which young people might have more serious problems?

  Again, don't prompt too much – idea is to get their views, rather than feed them what we know

  If we could identify that some young people were more likely than others to have more serious drug problems, what do you think we should do?

  Probe: focus particular resources towards them? What resources / support would help?

Information

If you wanted to find out about illegal drugs, where would you go / who would you ask?

Eg, doctors, friends, teachers, websites (which ones) etc

Which would you trust the most?

Which of these sources do you think young people would use?

Which do you think they would trust the most?

Wrap-up

- Review key points from discussion, eg:
    - Check group is happy with summary / doesn't want to add anything.
    - Any more questions?

Ask who would be interested in coming to the workshop. They should provide contact details (or liaise with group organiser about this). Give them the details of the workshop and say that someone will contact them again next week to check that they're still ok to come, answer any questions etc.

In some groups (especially the recovering user groups) it will be important to emphasise that we will not identify people coming to the workshop in any way – they will all just be 'general public'.

EVALUATION FORMS!

Workshop – Facilitators' Agenda

9.45 – 10.00 **Introductions**

Welcome and background to *drugsfutures*

10.00-10.30 **Your views on drugs and drug use**

OPM explains reason for vote / repetition at end of day, when results will be shown
Questions (following warm-up quiz

Which of these drugs do you think is most harmful to young people as individuals?

1. Alcohol
2. Cannabis
3. Nicotine
4. Heroin
5. Solvents
6. Ecstasy

Which of these drugs do you think is most harmful to wider society?

1. Alcohol
2. Cannabis
3. Nicotine
4. Heroin
5. Solvents
6. Ecstasy

Here are six factors which might make a young person more vulnerable to illegal drug use. Please rank these in order of importance

1. Having suffered from child abuse
2. Having parents who use drugs
3. Genetic make-up
4. Mental Health problems
5. Peer pressure 22% (NOTE DIFFERENT ORDER FROM EXETER)
6. People using drugs in the neighbourhood (NOTE DIFFERENT ORDER FROM EXETER)

Which of the following would be of most benefit to the way we approach drug addiction in the future?

1. Targeting social resources at young people whose family background or environment makes them more likely to use or become addicted to drugs
2. Vaccinating all babies to prevent addiction (NOTE DIFFERENT ORDER FROM EXETER)
3. Targeting social resources at all young people regardless of their family or environment

Which of the following do you think would cause most harm to a young person?

1. Having mental health problems
2. Having drug abuse problems
3. Not sure

Which of the following approaches do you think is most effective in treating young people with mental health problems?

1. Use the appropriate medication
2. Provide individual family support
3. Both medication and support
4. Not sure

10.30–11.00 **Introduction to the issues**

Introductions in small groups – round table: each person to introduce their neighbour and have brief discussion about how they responded to the idea of the kind of drug mentioned in the voting (ie, drugs to improve concentration/memory)

Brief discussion:

- Why do children and young people take drugs?
- Besides illegal drugs, what other drugs might young people use? What do you think the advantages and disadvantages of using these drugs might be?
- What do you think we still need to learn about young people and drug use?

Overview of group's attitudes to the above, with key points

- IMPORTANT: Start to develop a list of factual information that participants feel would help them to think about these issues. Explain experts will be coming in the afternoon and we want to make the best use of their knowledge that we can.

11.00–11.15 BREAK

11.15–12.00 **Providing the background – scenarios and briefing notes**

Small group work – 4 facilitated groups.

Facilitator reads the scenario to the group: brief discussion of initial responses.

Facilitator reads through briefing notes with group: brief discussion of initial responses: anything seen as particularly relevant to the scenario.

Opening question (this is primarily for warm-up, but will be reviewed in the plenary, when people can add comments).

- If you were in Suniti's position, would you be most concerned about mental health problems or possible drug addiction?
- What should be done to prevent young people from taking drugs?
- What should be in place to help young people with mental health problems?
- Are there different approaches we should take, depending on the age of the children/young people?
- Do you think there is a relationship between mental health problems in young people and drug use?

Facilitator: explore reasons for different views – focus on how views might change in the future.

12.00–12.30 Feedback & plenary

12.30–13.15 Lunch

13.15 – 13.30 Brief introduction from experts (name, particular interests/experience)

13.30 -14.00 **Information gathering session**
Small group work – exploring the issues: 4 facilitated groups:

Introduce the question(s) for your group.

What information would we like from the experts to help us answer this question?

Write questions on red cards: post these up in your corner.

FACILITATORS: Look at questions on your wall and select: include range of fact-based and more general 'opinion' questions (eg, where answers might provide insight into the range of views or approaches to a problem/issue)

14.00–14.30 **Expert panel / Question and answer session**
Experts provide responses to questions.

Open question and answer session.

14.30 – 15.00 **Answering the questions and presenting the outputs**

Further discussion and development of response and recommendations.

ASK FOR A VOLUNTEER TO DO FEEDBACK AT END OF DISCUSSION.

Experts: please circulate round groups, rather than staying with one group, to ensure that all participants have access to your expertise.

- Facilitator: help team to put together a presentation on their discussion findings:

– Presentations should include the questions being addressed, their answers to the questions and the reasons for their answers

– Decide on who is going to do the presentation (could be the whole group)

15.00 – 15.15 **BREAK**

15.15 – 15.45 **Each group presents their findings in turn**

Followed by question and answer session: facilitators and experts to ask groups what issues they discussed, what they think are the common points across all the four groups.

By end of session:
1. Clear and agreed responses to each of the scenario questions
2. Agreed recommendations across all participants (eg, policy; support that should be developed; medical treatment; research priorities)

15.45 –16.00 Closing ppvote / view results from morning vote
16.00 - 16.30 Thanks & close (from OPM & WG member/AMS)
Evaluation questionnaires & incentives

Group 1 questions:

- What are some of the things we should do to help prevent vulnerable young people who have been identified as being at particular risk from becoming addicted to drugs?
  - Would it depend on how we identified them – eg, using genetic testing or looking at their family and social background?
  - Who should be involved – and what role would they play?
  - At present, it seems that educational approaches are not working as effectively as hoped. Why do you think this is?

Group 2 questions:

- What do you think might be the impact if a young person was identified as having a possible future addiction to alcohol or other drugs? What would the impact on the young person be? Would it depend on how they were identified?
  - What would the impact on the family be? Would it depend on how they were identified? (eg, genetic testing or looking at family/social background)
  - What do you think we should do with the information, if we could identify a young person as vulnerable to future drug use or addiction?

Group 3 questions:

- What would parents need to know in order to make decisions if their child is found to be vulnerable to addiction in the future?
  - What would they need to know immediately?
  - What would they need to know over the longer term?
  - Is having information enough?
  - What kind of support systems might be provided to parents whose child was identified as vulnerable to future addiction?
  - What sources of information about the benefits and harms of recreational and mental health drugs do you see as trustworthy – and why?

Group 4 questions:

- What do you think might be the impact if a young person was identified as having a possible future mental health problem?
  - What would the impact on the young person be? Would it depend on how they were identified?
  - What would the impact on the family be? Would it depend on how they were identified? (eg, genetic testing or looking at family/social background)
  - What do you think we should do with the information, if we could identify a young person as vulnerable to mental health problems?
  - What kind of support should be in place for young people who are identified as vulnerable to future mental health problems?
  - What kind of support should be in place for parents of young people who are identified as vulnerable to future mental health problems?

Workshop – Participants' Agenda

9.45 - 10.00 **Introductions**

Welcome and background to *drugsfutures*

10.00 - 10.30 **Your views on drugs and young people**

Voting session

10.30 - 11.00 **Looking at the issues**
Small group discussion on drug use amongst young people

11.00 – 11.15 BREAK

11.15 – 11.45 **Testing times for Colin**
Small group discussion of the issues raised in the scenario

11.45 – 12.00 **Feedback & plenary**

12.30 – 13.15 LUNCH

13.15 - 13.30 **Introduction to the experts**

13.30 - 14.00 **Information gathering**
Developing questions for the experts

14.00 – 14.30 **Questions and answer session**
Responding to the questions
14.30 – 15.00 **Developing presentations**

15.00 – 15.15 BREAK

15.15 – 15.45 **Presentations**
Small group presentations

15.45 – 16.00 **Your views on drugs and young people**
Second voting session

16.00 - 16.30 Thanks & close (from OPM & WG member/AMS)
Evaluation questionnaires & incentives

Scenario

A possible future….

The year is 2025, and Suniti is thoughtful.

Her son Dev has never been behind at school. Suniti and her husband are well-paid professionals who find time to play in a string quartet, and Dev has plenty of life advantages.

But Dev has now reached the age of 13, and Suniti is wondering what happens next. The doctor has pointed out that her husband Steve's family had two severe cases of manic depression – or what the doctor called 'bipolar disorder' - during the 20th century. And although she never mentions it, she avoids alcohol because of what happened to her own mother and aunt

Suniti knows that Dev is now reaching the age at which children often start to encounter illegal drugs. She's worried that he might have inherited genes from her side of the family and be at risk of getting addicted to something – alcohol or heroin or one of those new designer drugs that are around. The school has offered tests to see if he is at risk of addiction or mental health problems – this would help them to give Dev additional support. One test would look at his genes, another at his behaviour. This would give them some guidance on whether his genes suggest he's at risk of addiction – and they might also find out from the tests if he'd inherited Steve's family genes for bipolar disorder.

Suniti's not sure if she wants Dev to have the tests though. She and Steve have always wanted to trust their son as much as they can. They avoided the gene tests that many parents have of their newborn children so that he would not be characterised as a problem child before he had even started growing. Their approach seems to have worked so far.

Drugs to treat mental health now work a lot better than they did and there are better treatments for addiction to street drugs too. So even if they found out he had inherited her family genes and might become an addict, or Steve's family genes for bipolar disorder, there would be treatments he could take to help prevent the worst case scenarios. She can't decide what to do. Let him take the new drugs or try the local education and counselling services? Whatever, she wants to find a way that will keep him well and happy, rather than getting ill like people used to do.

Questions

- What should be done to prevent young people from misusing drugs?
- What are some of the things we should do to help prevent vulnerable young people who have been identified as being at particular risk from becoming addicted to drugs?
- What do you think might be the impact on a child or their family of being identified as having a possible future addiction to alcohol or other drugs? (Remember: we may be able to identify people through genetic testing or by looking at things like their family situation, school attendance record or criminal behaviour.)

- What would parents need to know in order to make decisions if their child is found to be vulnerable to addiction in the future?
- What sources of information about the benefits and harms of recreational and mental health drugs do you see as trustworthy – and why?

Briefing notes: Drugs and young people

Young people are especially vulnerable to drugs because their brains are still developing. But biology is only part of the story. Young people can come under peer pressure to use drugs, or be introduced to drugs by their parents. Preventing young people from experimenting with drugs has been a major focus of drug policy over recent years, but they still continue to take them. Why do you think this is?

Some figures

19% of 11-15 year olds have taken drugs in the last year (Drug use, smoking and drinking among young people in England in 2005, DoH 2006)

56% of school excludees have tried at least one Class B drug and 19% at least one Class A drug, compared to 15% and 4% respectively for children in school* (Mori 2004 Youth Survey, YJB)

In England during six months to end March 2001, 1 in 7 presenting to services with problem drug misuse was under 20. (Statistics From the Regional Drug Misuse Databases for 6 Months Ending March 2001, DoH 2002)

42% (112,000) of estimated problematic users aged under 25 years (Statistics From the Regional Drug Misuse Databases for 6 Months Ending March 1998, DoH 1999)

Risk factors:

- A young person's genetic make-up
- A young person whose mother used drugs whilst they were in the womb
- Individual characteristics such as an impulsive personality or doing poorly at school
- Family characteristics such as child abuse or neglect, or parents who have mental health problems or who use drugs
- Features of the wider environment such as the availability of drugs, peer pressure or the way drug use is presented in the media or films

Drugs and young people – The future

We use a variety of ways to try to discourage young people from taking recreational drugs. There are a lot of arguments about which ways are most effective. As we learn more about why some young people are particularly vulnerable to drug use or addiction, we will be more able to base our approach on evidence. However, this knowledge will also present us with some new questions.

How do we help to prevent young people from taking drugs?

Education
Some argue that balanced and accurate drug education is more effective than moralistic or scare tactics. In the future, we may be able to use genetic screening to test young people and identify those who are most vulnerable to drug use. If this happens, we will need to think about whether these tests should be compulsory. We will also need to think about the kind of information young people and their parents will need.

Social programmes
Education and information are not enough on their own. Family and the wider environment are amongst the risk factors which seem to play a role in young people's drug use. We will need to consider what kind of wider social initiatives might help to reduce these risk factors in young people, whose needs are different to those of adults.

Detection
On 5 January 2005 the Abbey School in Faversham, Kent, became the first state school in England to start random drug testing. This led to widespread debate. A Druglink magazine investigation in 2004 found that at least 100 secondary schools are now using drugs dogs regularly. If we focus more on these kinds of initiative, we will need to think about how they impact on young people and whether these detection measure help to stop them from using drugs.

The World Health Organisation provides the following broad categorisation of drug use:

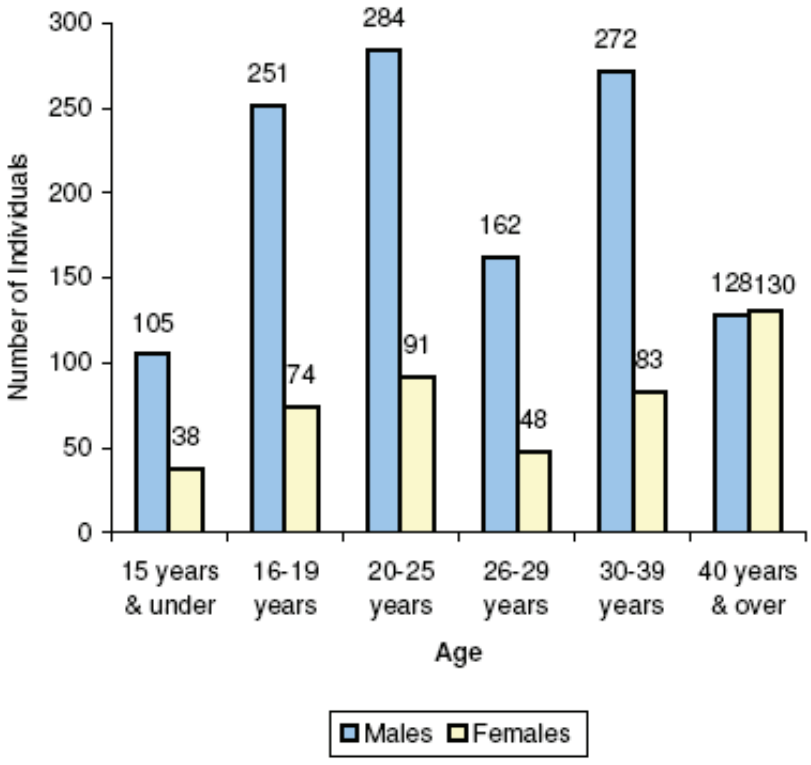
- *Experimental use* that might or might not continue
- *Functional use* that services some purpose, eg, recreation, but does not cause problems for the user
- *Dysfunctional use* that can harm the user, by leading to psychological problems or difficulty in leading everyday life
- *Harmful use* that causes damage to the user's physical or mental health
- *Dependent use* that could involve growing more tolerant of the effect of a drug, withdrawal symptoms if drug use is stopped, and continued use

Additional background

Northern Ireland Statistics - Young people[98]

This bulletin summarises information on people presenting to services with problem drug misuse and relates to the 12-month period ending 31 March 2006. It is the fifth bulletin reporting on information collected through the Northern Ireland Drug Misuse Database (DMD), which was established in April 2000 and which collects detailed data, including information on drugs misused and injecting behaviour, on those presenting for treatment.

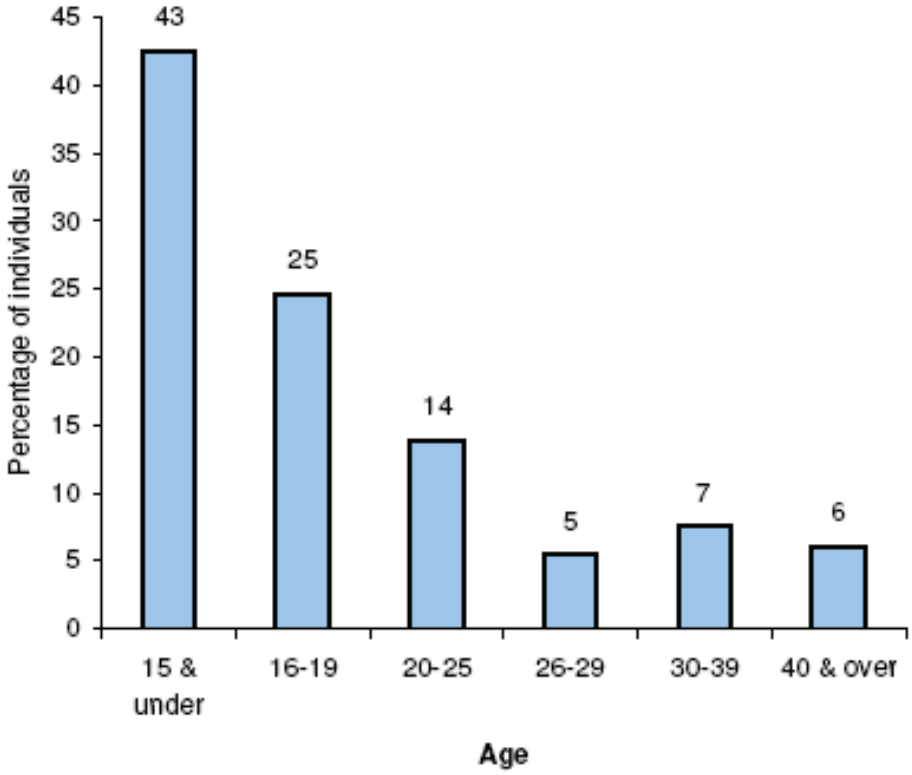
Figure 1. Age and gender of individuals presenting for treatment: 2005/06



Source:
Statistical Bulletin 3/2006
Statistics from the Northern Ireland Drug Misuse Database 2005/06

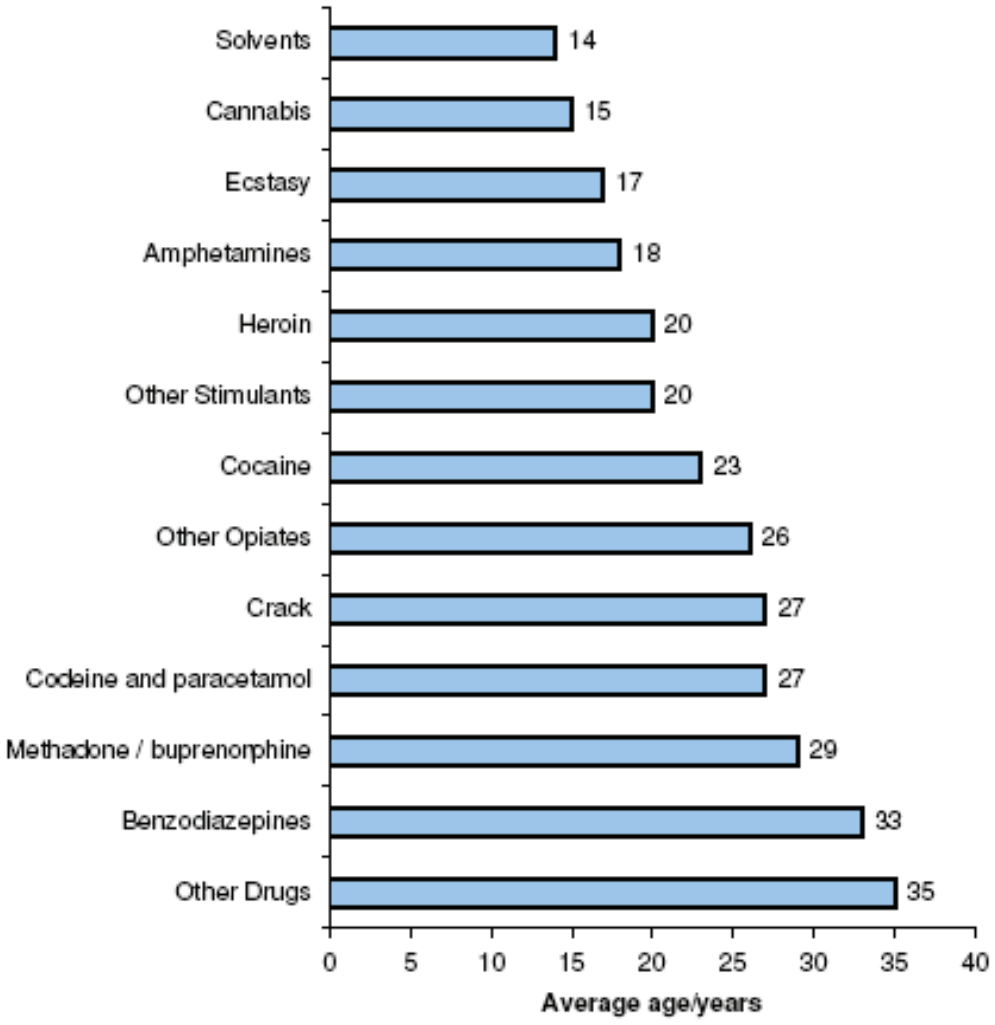
[98] This additional information was available for participants to use if they wanted further background to the issues and to gain insight into drug use in Northern Ireland.

Figure 5. Age of first use: main drug of misuse: 2005/06



Source:
Statistical Bulletin 3/2006
Statistics from the Northern Ireland Drug Misuse Database 2005/06

Figure 6. Average age of first use for different main drugs: 2005/06



Source:
Statistical Bulletin 3/2006
Statistics from the Northern Ireland Drug Misuse Database 2005/06

Appendix 8. Drugs and mental health

Outreach discussion guide

Introduction:
Our discussion today is part of a nationwide project, commissioned by the Academy of Medical Sciences (locations, website etc – write-up url (www.drugsfutures.org.uk) and ask people to visit it if they have access to a computer – and tell their friends! Findings will be reported to the AMS working group, who will include them in their report to the government.

Introductions (5 mins)
Before I explain a bit more about the project, we should introduce ourselves.

In pairs: get your partner's name and have a quick discussion about the first things that come into your head when you hear the words 'mental health' and the word 'drugs'.

Round the room: each person introduces their partner and their top-of-mind associations with 'mental health' and 'drugs'. Explore anything interesting / unusual.

Focus of discussion: (5-10 mins)
We're looking at knowledge about the brain and new drugs for mental health problems that might be developed in the future. We're interested in your views on some of the issues that we, as a society, will need to think about in relation to these developments. For example: we're learning more and more about the brain and understanding what happens in the brain when someone has a mental health problem. This might be things like chemical imbalances – too much of a particular chemical, or too little. Research into how we might correct these imbalances is helping us to develop new drugs.

But there might also be issues we need to think about: for example, should we use drugs for all mental health problems and if not, what other ways could we use to help people with mental health problems? Should people with some mental health problems be required by law to take a drug, if there is one that might help them? What might be the benefits and disadvantages of our new knowledge or of new drugs?

EMPHASISE: you don't need to know anything about the topic – don't need to know anyone with a mental health problem or have had one, or know anything about the science – that's the expert's job. We're interested in your views about how we, as a society, should respond to the new possibilities that science may give us in the future.

Questions?
Mobiles

Before we start discussion: Explain about workshop: give people the date: say you'd like to invite some of the people here today to the workshop and at the end of the discussion,

after people have had time to check their diaries and think about it a bit, you'll put names in a hat (those who are available to come on the day) and draw names. (I suggest, if possible, that you draw 7 names – some will probably drop out beforehand and if we're a few over, we can live with that. Mentioning incentives might help to encourage interest – but gauge this, as we don't want lots of fed-up people who wanted to come & wanted the money – this will depend on how many people in the group and what they seem like.

Range of mental health problems and approaches to these

What are the different sorts of mental health problems that people suffer from? (Flipchart)

PROBE: If things like Alzheimer's disease or dementia not mentioned, find out if people think of these as mental health problems or are they seen more as diseases of ageing? Things like extreme shyness? Eating disorders (anorexia)?

How do we decide if someone has a mental health problem?

Are there particular sorts or groups of people who are more vulnerable to mental health problems (probe: different ages, gender, ethnicities, lifestyles, personality types etc)

Are different sorts of treatment more appropriate for different groups of people? (eg, less / more appropriate to use drugs for younger people?)

Treating mental health problems (15-20 mins)

Looking back at the list we've made: Are drugs the most effective or appropriate treatments for all of these mental health problems, or just some of them? Which?

For each one, discuss why they think this – highlight areas of uncertainty – try to find out what factors enter into deciding whether or not drugs are or are not appropriate.

Those problems that we've decided don't need drugs: how do you think we could treat these? What sorts of approaches do we take now? What approaches might we develop in the future – what do you think would work? Do you think everyone would find these acceptable – why / why not?

Discussion: do you think our attitudes, as a society, are different, depending on whether people are taking drugs for a mental health problem or being treated in some of the other ways we've mentioned? Why? How? **Probe:** is there something particular about taking a drug that makes us think about it differently? What?

Natural/unnatural drugs (5-10 minutes)

Some people prefer to take what are often called 'natural' drugs – like St John's Wort, for example, which is used for depression and can be bought over the counter at chemists or health food stores.

How do we decide if a drug is 'natural' or not?

Explore relative importance of origins of drugs (eg, plant materials); production process; perceptions of relative safety (eg, side-effects)

Why do some people prefer 'natural' drugs?

Over the counter mental health drugs (5-10 minutes)

St John's Wort is often used by people to treat mild or moderate depression. Other drugs available over the counter, such as aspirin or paracetamol, or antihistamines may be used.

What are your views on people diagnosing and treating their own mental health problems?

Which mental health problems do you think it is appropriate for us to treat ourselves, with drugs available over the counter? Why / why not?

The future of mental health

How would you like to see our attitudes to mental health change in the future?

PROBE: development of drugs for wider range of mental health problems? Development of other approaches to treating mental health (which approaches?); any other steps that could be taken to improving mental health?

Review discussion:

Different mental health problems and appropriate responses to these (drugs, other approaches)

How we tell if someone has a mental health problem

People with particular vulnerabilities and appropriate treatments for different groups?

Changing attitudes towards mental health, depending on whether or not people are using drugs for mental health problems

Where we place the difference between natural and unnatural drugs

What drugs should be available over the counter (attitudes towards self-diagnosis and treatment)

Future of mental health – changing attitudes / changing treatments

Any other questions?

Ask people who have said they can come to complete contact details form (get landline & mobile & email addresses, if possible). Group organiser may wish to facilitate contact with participants. Give them the details of the workshop and say that someone will contact them again next week to check that they're still ok to come, answer any questions etc.

In some groups (especially the user groups) it will be important to emphasise that we will not identify people who attend the workshop – they will all just be 'general public'. We will not indicate who, amongst workshop participants, has been to a previous discussion, for example.

EVALUATION FORMS!

Workshop – Facilitators' Agenda

9.45 – 10.00 **Introductions**

OPM:

- Welcome to everyone / thanks for coming
- Introduce Robert Frost, AMS

Rob:

- Brief background to and history of AMS project (Working Group, 3 types of drugs)
- Importance/value to AMS of public views
- What will happen to the findings: timing, who report will go to

OPM:

- Introduce OPM team and experts (AMS WG and others)
- Agenda for day: focus on mental health drugs
- No right or wrong answers
- Business: fire alarms, toilets, mobiles

EXPERTS: PLEASE SIT AT ANY TABLE

10.00-10.30 **Your views on drugs and drug use**

OPM explains reason for vote / repetition at end of day, when results will be shown. Explain quiz (just to get people used to the handsets)

Questions (following warm-up quiz)

Which one of the following areas do you think it is most important for scientific research to focus on in the future?

1. Developing new treatments for depression
2. Developing new treatments for Alzheimer's Disease
3. Developing new treatments to prevent addiction to drugs
4. Developing new treatments for people already addicted to drugs
5. Other

Which of the following would most benefit the way we approach mental health in the future?

1. Reducing stigma
2. Developing new drugs
3. Developing new alternative therapies

Which of the following do you think would cause more harm to a young person?

1. Mental health problems
2. Drug abuse problems

Which of the following approaches do you think is most effective in treating young people with mental health problems?

1. Use the appropriate medications
2. Provide individual family support
3. Both medication and support
4. Not sure

Which one of the following statements do you most agree with?

1. Adults should legally be allowed to take any drugs they want
a. Adults should legally be allowed to take some drugs that are currently illegal but some should remain restricted
b. All use of drugs for non-medical reasons should be illegal (remember that alcohol is a drug)

Which one of the following do you think is most likely to lead to someone having mental health problems?

1. Stress
2. Genetic make-up
3. Personality type
4. Alcohol / drug abuse
5. A traumatic life event

10.30–11.00 **Introduction to the issues**

Introductions in small groups – round table: each person to introduce their neighbour and have brief discussion about their responses to the vote questions, how they voted and why they voted that way.

Brief discussion:

- **Are there any mental health drugs that you should be able to buy at your local chemist, without a prescription?**

Outcomes: Overview of group's attitudes to the above, with key points

EXPERTS: PLEASE FEEL FREE TO ASK QUESTIONS/ EXPLORE VIEWS WITH PARTICIPANTS AND OFFER INFORMATION THAT YOU THINK MIGHT HELP PEOPLE CONSIDER THE QUESTION.

11.00–11.15 BREAK

11.15–12.00 **Providing the background – scenarios and briefing notes**

Small group work – 4 facilitated groups.

Facilitator reads the scenario to the group: brief discussion of initial responses.

Facilitator reads through briefing notes with group

- What are your initial responses to this scenario?
- What do you think of the position that Jane is in? Should prescription drugs be available for someone with mild depression? Why / why not?

- What do you think of Sonal's situation? Do you think she has made the right choice to use a pill that blocks the effects of cocaine, rather than going to prison? Why?

Facilitator: explore reasons for different views – focus on how views might change in the future.

- Eg: how do you think our views on the use of drugs for treating mental health problems will change in the future?

How do you think our views on the use of pills that block the effects of drug use will change? Is this a positive or a negative change?

12.00–12.30 **Feedback & plenary**

12.30–13.15 Lunch

13.15 – 13.25 **Plenary Facilitator: explain session and introduce each of the experts in turn**
Each expert to provide brief introduction to themself/their work (3-5 minutes): Name, particular areas of interest (eg, research, community mental health, older people, young people etc);

13.25 -13.50 **Plenary Facilitator: explain session briefly, then return to table.**

Information gathering
4 facilitated groups

Facilitator: Introduce the question(s) for your group.

- What are the issues we need to consider to help us answer our questions?
- What information would we like from the experts to help us answer this question?

Facilitator: Help participants to think through the issues that might need to be considered in answering their question. Write questions on red cards: post these up in your corner.

Plenary Facilitator: give 5 and 1 minute warnings to close session: each table facilitator to stand by their sticky wall and select range of fact-based and more general 'opinion' questions for answer (eg, where answers might provide insight into the range of views or approaches to a problem/issue)

13.50–14.10 **Expert question and answer session (facilitated)**

Experts provide responses to questions.

Facilitator: encourage participants to ask further questions if there is time.

14.10 – 14.45 **Answering the questions and presenting the outputs**

Outcome of this session will be a presentation that answers the table's questions.

Facilitator: ask for volunteer(s) to put together the presentation and volunteer(s) to do the feedback to the whole group at the end.

Experts: please feel free to circulate round groups, rather than staying with one group. This will ensure that all participants have access to your expertise and you have an opportunity to hear the range of discussions.

Facilitator: help team to put together a presentation on their discussion findings: Presentations should include the questions being addressed, their answers to the questions and the reasons for their answers
Decide on who is going to do the presentation (could be the whole group)

14.45 – 15.00 **BREAK**

15.00 – 15.30 **Session facilitator: ensure you have names of presenters from each table.**

Each group presents their findings in turn

Followed by question and answer session: facilitators and experts to ask groups what issues they discussed, what they think are the common points across all the four groups.

By end of session:
1. Clear and agreed responses to each of the scenario questions: indicate issues on which the group has not agreed a common response;
2. Agreed recommendations across all participants (eg, policy; support that should be developed; medical treatment; research priorities)

15.30 –15.45 Closing ppvote / view results from morning vote

15.45 - 16.00 Thanks & close

AMS

- reiterate value of participants' views
- remind them what will happen to findings

OPM

- Thank participants
- Explain that they will receive a summary report
- Invite participants to visit website (url on display)

- Ask participants to complete evaluation questionnaires
- Explain how to get incentives, in exchange for their questionnaire

Group 1 questions:

- Are drugs the most effective or appropriate treatments for all mental health problems, from mild depression to more severe problems?
- If we as a society decided that we should not use drugs for a particular mental health problem, what other approaches might we take to these problems in the future?
- What treatments should be used instead of drugs?
- What treatments should be used in addition to drugs?
- Is it ever acceptable to give drugs to people with mental health problems without their consent?

Group 2 questions:

- What mental health problems can you think of for which new drugs should be developed for in the future?
- How do we decide which problems to focus on?
- How do we balance the needs of different groups (eg, older people, younger people?)
- Which do you think should be the most important factor in deciding where we focus our resources:

  The impact on the individual?

  The wider cost to society?

Group 3 questions:

- Should drugs be developed for conditions that we currently see as features of someone's personality, like extreme shyness?
- Is it possible to distinguish between shyness as an aspect of someone's personality and shyness as a mental health problem?
- What might the consequences be of accepting things like shyness as mental health conditions?
- What might the benefits be to the individual?

Group 4 questions:

- New and more effective treatments are becoming available for diseases associated with ageing, such as dementia and Alzheimer's Disease. This will mean there are more older people in society who are mentally alert.
- What might be the issues of balancing mental well-being with the physical effects of ageing?

- Do you think that the needs of carers should be taken into account when deciding on treatments for people with Alzheimer's or dementia?
- What would be the advantages – and who for?
- What would be the disadvantages – and who for?

Workshop – Participants' Agenda

9.45 - 10.00 **Introductions**

Welcome and background to *drugsfutures*

10.00 - 10.30 **Your views on drugs and drug use**

Voting session

10.30 - 11.00 **Looking at the issues**
Small group discussion on drug use for mental health issues

11.00 – 11.15 BREAK

11.15 – 12.00 **John feels lucky…**
Small group discussion of the issues raised in the scenario

12.00- 12.30 **Feedback & plenary**

12.30 – 13.15 LUNCH

13.15 - 13.25 **Introduction to the experts**

13.25 – 13.50 **Information gathering**
Developing questions for the experts

13.50 – 14.10 **Questions and answer session**
Responding to the questions

14.10 – 14.45 **Developing presentations**

14.45-15.00 BREAK

15.00 – 15.30 **Presentations**
Small group presentations

15.30 – 15.45 **Your views on drugs and mental health**
Second voting session

15.45 - 16.00 Thanks & close (from OPM & WG member/AMS)
Evaluation questionnaires & incentives

Scenario

A possible future….
The year 2025, and John is enjoying himself.

John has been taking a pill to ward off depression for about 10 years and it seems to work. He was close to suicide before the new drugs came out. He couldn't take the earlier ones – they disagreed with him and made him feel aggressive and angry. There are a lot of people around who live on a more even keel now than before because of the new drugs. But sometimes he wonders where all the colourful characters have gone.

But not everyone is as lucky as John. Though there are lots of pills available for different mental conditions, not everyone can get them prescribed. For one thing, his friend Jane is not depressed enough. If she was more depressed, there are pills for her condition, but she is not an extreme enough case and cannot afford to buy them herself.

Sonal isn't happy either. She has been addicted to cocaine in the past and now takes a pill that blocks its effects. She can work again, but she says she used to like her cocaine. She takes the pill because the judge said the alternative was prison. They told her at the clinic that the pills were natural, derived from plants, but she told them that the same was true of cocaine.

Still, Ash has no complaints. Three years ago he thought he was too shy to go to parties, but now the doctors have realised that he just has Anxiety Disorder. Fortunately there is a pill for that too, and now he is on the town regularly with his new girlfriend. What will they think of next?

Questions

- Are drugs the most effective or appropriate treatments for all mental health problems, from mild depression to more severe problems? Why – or why not?
- If we as a society decided that we should not use drugs for a particular mental health problem, what other approaches might we take to these problems in the future?
- If someone is diagnosed with a mental health problem and there is a drug available which might help them, should they be required to take it – and why?
- Are there any mental health drugs that you should be able to buy at your local chemist, without a prescription?
- What mental health problems can you think of for which new drugs should be developed for in the future?
- Should drugs be developed for conditions that we currently see as features of someone's personality, like extreme shyness? - Why - and what might the consequences be?

Briefing notes: Drugs and mental health

Mental health is a growing concern for several reasons. We have an ageing population, which means that more people will have diseases which affect their mental health, like Alzheimer's or dementia. A growing number of young people are also being diagnosed with mental health problems. We are also identifying more mental conditions which might be treated. Some of these include things like shyness, a sensation we have all had but which is very damaging for some people.

How do they work?

There are a range of different drugs for treating mental health problems. These include:

- Benzodiazepines – these are calming drugs and treat (but don't cure) things like tension, feeling shaky, and difficulty in thinking straight. They work by making your brain's own 'calming' chemicals more powerful.
- SSRIs – these are drugs such as Prozac and Seroxat, used to treat depression. SSRI stands for Specific Serotonin Re-Uptake Inhibitors. Serotonin is a chemical that occurs naturally in the brain. We know it is not as active in the brain of someone feeling depressed. Prozac, and similar drugs, help to increase the action of serotonin and so help to improve mood.
- Anti-psychotics are used to treat things like psychosis and schizophrenia. They can also be used to help manage confusion, dementia, and personality disorder. They work by helping to block the effects of a chemical called dopamine. This chemical is mainly involved with thinking, emotions and behaviour. When dopamine is overactive, it upsets the normal balance of the brain. The drugs reduce the effect of the dopamine and correct the balance.

Drugs are not the only way to treat mental health problems. There are treatments like cognitive behaviour therapy. This looks at how someone thinks about themself, the world and other people and how what they do affects their thoughts and feelings.

Accidental discoveries

Sometimes scientist discover that a drug developed for one condition is useful in treating something very different. For example, last year a hormone treatment that was used to induce abortions was found of possible use in provide a rapid-acting treatment for depression. This drug demonstrates that there can be a lot of debate around drugs. Anti-abortion activists have long campaigned for the withdrawal of this drug. Using it for routine depression treatment is likely to be controversial.

Mental Health Drugs – The Future

As we learn more about how the brain works, we will discover new ways to treat mental health problems. Knowing more about the brain can help to speed up the time it takes to develop new drugs. This is because we can identify particular parts of the brain we want to target, rather than taking a more 'hit and miss' approach. We might also be able to develop 'personalised medicine' for people with specific diseases or vulnerabilities. This means that rather than everyone with a particular condition taking the same drug, drugs would be developed that took into account the patient's own genetic make-up. This could mean safer and more effective drugs, with fewer side-effects.

Some of the questions we will need to consider

As we learn more about the brain and get better at targeting drugs, will we start to see ' healthy' people as believing they have a mental health condition that needs treating?

Something to think about

As we become more able to treat mental health problems with drugs, perhaps we will start to look at 'ordinary' social problems like shyness as mental health problems.

In the future, we may start to focus on mental well-being, rather than mental illness. For example, there might be well-being centres at your local library or leisure centre. We might teach emotional literacy in schools. Do you think changing our focus from mental illness to mental well-being will mean we will need to take fewer mental health drugs in the future?

Some possible future mental health treatments:

- Drugs reducing stress might be effective for some people suffering from depression. High levels of stress can play a part in depression
- New 'mood-altering' drugs may be available. These drugs may blur the boundary between drugs use to treat problems and drugs use for 'cosmetic' reasons
- The pharmaceutical industry is placing emphasis on mental diseases of old age, primarily Alzheimer's, Parkinson's, depression and sleep disorder,
- Drugs that enhance general brain functions in people who have had strokes or acute brain injury may be developed
- Understanding the genetic basis of depression may lead to new antidepressants

Appendix 9. Brainbox

Brainbox 1: Facilitators' Agenda

Friday 2nd February – 18.30 – 21.00

18.30 – 18.45 **Introductions**

Welcome (OPM):

- Brief overview of event: **Main question to be answered over the 3 ½ days is: Scientists are learning more about the brain and able to develop new and different drugs for a range of purposes. What principles and rules should guide these developments? What kind of drug culture do we want for our future?**
- History: Foresight / Meeting of Minds/overview of drugsfutures project
- Agenda
- Business (fire escape/toilets/mobiles)
- Filming (permissions to have been signed). (Elliot not filming but there to meet everyone.)

18.45 – 19.00 **Introductions (in pairs then feedback). Questions to address:**

- Family/working status
- How do you feel about taking part in the Brainbox?
- What are the main reasons why you decided to come?

19.00 – 19.20 **4 groups**

2 groups discuss:

- What are the different reasons why people use drugs that affect their brains?

(Flipchart)

2 groups discuss:

- What influence do the following have on the way we think of drugs that affect the brain?
  - media
  - health professionals
  - family and friends
  - the environment we live in
  - our mental health
  - drug companies

(Flipchart)

19.20 – 19.45 **Plenary: Feedback and discussion**

Discuss reasons for drug use: initial thoughts on legitimate / illegitimate use: use of illegal drugs, by people who have mental health problems: future developments (eg, harmless/non-addictive recreational drugs).

Influences on attitudes: are they good / bad influences? Different views from different sources?

19.45 – 20.00 **Break**

20.00 – 20.20 **Sort cards: working in 3 groups;**

Each groups has 5 minutes to brainstorm as many harms as they can come up with. Put these up on sticky walls. Then use pre-printed cards – any that you missed in your brainstorm that you want to include?

Views of harm attached to the INDIVIDUAL from use of drugs:
Views of harm attached to a FAMILY when one of its members uses drugs.
Views of harm attached to SOCIETY from use of drugs:

20.20 – 20.35 Feedback on sort card exercise & plenary discussion. EXPLORE:
Views of harm arising from use of the substance itself / harm resulting from illegality of possession

20.35 – 20.50 Give out and explain packs, which include:

- Overview of the 5 themes (note we're going to focus on Mental Health in the morning, if anyone wants to read anything beforehand)
- Initial briefing notes on issues to be addressed

20.50 – 21.00 Overview of tomorrow's agenda
Questionnaires
Any questions
GIVE PEOPLE PRE-EVENT QUESTIONNAIRE TO TAKE HOME AND COMPLETE & BRING BACK THE NEXT DAY.
Close & thanks.

Saturday 3rd February
AM: Introduction to the themes
PM: Identify issues in common / differences / aspirations & concerns across the themes

9.45 – 10.00 Coffee & sign-in
10.00 – 10.15 **OPM: Welcome back**
Note some extra people in the room: Robert Frost from the Academy of Medical Sciences and Phil Cowen from the University of Oxford. Phil is going to help us understand

and think about some of the issues around mental health and drug use.

Before we get stuck into discussion, I'd like to introduce Robert Frost, the Project Manager at the Academy of Medical Sciences. He's going to tell you a bit more about the project as a whole, why the Academy wants to hear from the public and what some of the issues they've been considering so far.

Rob – I suggest 5-10 minutes of background to the project, then take any questions.

10.15 – 11.00 **OPM:**
Introduce Prof. Phil Cowen again. Brief description of the session: Phil is going to give us a brief presentation on the current state of our knowledge of the brain, what things our growing knowledge might make possible in the future and what the future might hold, in terms of the way we understand and treat mental health problems.

Phil: present / speak for around 10 minutes – focus needs to be future-oriented, as far as possible.

People have a few minutes to think up questions on Phil's presentation. Open discussion on the issues raised, what surprised people, what they find promising about issues raised, what concerns them. (**Facilitators, note-takers: if necessary, ask direct questions, remembering future focus. Phil: if you're interested in finding out about the participant's views, feel free to ask them questions.)**

11.00 – 11.15 **BREAK**

11.15 – 12.15 **3 small groups.**
Phil: would you mind moving around the groups – ie, spend the first 20 minutes with Group 1, moving onto Group 2 for 20 minutes, ending with Group 3? Your role would be to:

Provide further information to help participants think through the issues

Suggest different options for approaching these kinds of problem

Raise any additional questions you think are relevant to the issues being addressed

KEEP FOCUS ON THE FUTURE

(Rob, you could rotate groups too, sitting in different ones

	to those that Phil is in.)
	Facilitator:
	What do you think of the situation in the scenario?
	What do you think is positive about it - why? What concerns you and why?
	Draw on project questions for further discussion, but we're not aiming to answer them at this stage. It would be more useful if you could get people to consider what additional information they would like to help them answer the questions – this will give us information on which experts we should invite to the second part of Brainbox.
	At the end of the session, each group should have:
	Response to scenario
	Positives about the situation described
	Negatives/concerns about the situation described
	A list of additional questions / information needed to help them think about the issues
12.15 – 13.00	**Plenary:** Each group to feedback on their discussion. General discussion about the points raised, in particular, clarification of what questions, additional information asked for.
13.00 – 13. 45	**LUNCH**
13.45 – 14.05	**Plenary**
	Based on our discussion this morning, how do you think our attitudes towards mental health and how we should treat it might change in the future?
	(give people 5 minutes to discuss in pairs/threes before responding.)
	(Explore drug solutions and social solutions – counselling / support / family interventions etc)
	If our attitudes towards mental health and drugs for mental health problems change, how do you think that will affect our attitudes towards other kinds of drugs?
	How? Why?
14.05 – 15.00	**3 small groups** We've looked at one future scenario and you've had an opportunity to discuss some of the issues. We're now going to split you into 3 groups and each group will look at a different

topic. The main purpose of this session is to give you an opportunity to explore some of the issues in more detail and help us to decide which experts we need to invite to the next part of the session, to help you answer the questions on these themes and the overall Brainbox.

Group 1: Drugs and young people

Group 2: Drugs for a smarter brain

Group 3: Drugs and the law

Facilitator: read through the scenario. Point out the briefing notes and review these with group. Note any questions, especially if these are related to the science/state of knowledge etc. (This will help us to tell who we need to invite for stage 2.)

UNFACILITATED WORK:
Once groups are happy about the task, leave them to discuss issues themselves. Someone in the group will need to record the discussion. I suggest you help them with the first question, to make sure they get off to a good start, then leave them.
REMIND THEM TO KEEP FOCUS ON THE FUTURE, NOT ON CURRENT SITUATION.

Ask them to choose someone / someone to volunteer to feedback on the discussion.

TASK:
Review the questions attached to your scenario and discuss these briefly.

For each question,

Record initial thoughts; record any differences of opinion across the group

make a list of further information that would help you to answer the questions.

(eg, more information on how genetic screening works; different ways in which regulation might work; more information about cognition enhancers (eg, effectiveness, timescales for development, potential risks etc)

15.00 - 15.15 **BREAK**

15.15 – 15.45 **Plenary**
Each group to present outcomes of their discussion, including:

- Quick description of the scenario that they're looking at
- Initial responses to the questions on the scenario sheets
- Additional information needed / questions raised

If time, quick responses at the end.

15.45 – 16.15 **Agreement, difference and additional questions**

- Participants review the findings from each group. Where they agree with responses, they add a GREEN dot. Where they disagree with responses, they add a RED dot. They should also add further questions that they think would help them to address the issues.
- What did people find most difficult to think about and why? (eg, is the issue inherently difficult/were there differences in opinion within the group/do you need more information to help you think about the issue?
- **ALSO: we have divided the main question into 5 different themes. Are there any themes you think we have missed that we need to consider in order to answer our main question? (FLIPCHART will have question/themes & relevant issues + space for additional suggestions.)**

16.15 – 16.30 **Plenary**

Check everyone happy / clear.
Explain diaries: asking for volunteers to record their feelings about taking part in the event, to note down any interesting things they read in the papers / saw on the television that are relevant to the discussion / any conversations with friends or family etc. Keep any interesting press cuttings in the diary. (This doesn't involve writing a book – just a few notes every now and then.)
Remind people about website.
Ensure everyone knows when next session is – tell them we'll be in touch before hand, just to make sure all ok.

Incentives

Brainbox 1: Participants packs

In addition to the materials here, packs included copies of all scenarios and briefing notes used in workshops.

Introduction to *drugsfutures*

Drugsfutures is a nation-wide project commissioned by the Academy of Medical Sciences (AMS). The aim of the project is to have a conversation with the public about how we as a society should respond to our growing knowledge about the brain and new drugs. The findings from the public conversation will inform future policy development in this area.

The events with the public are part of a wider project that the AMS is working on. Details of this are provided in your pack.

How does Brainbox fit in?

Brainbox is the central event of *drugsfutures*. This table shows you how it fits with the other events being held:

Activity	**Location**	**Topic**
Launch event	London - 31st January	All 5 themes
Brainbox – Part 1	Birmingham – 2nd / 3rd February	All 5 themes
Workshop 1	Liverpool – 17th February	Drugs and the Law
Workshop 2	Exeter – 24th February	Drugs and Society
Workshop 3	Glasgow – 3rd March	Drugs for a smarter brain
Workshop 4	Belfast – 10th March	Drugs and young people
Workshop 5	South Wales – 17th March	Drugs and mental health
Brainbox – Part 2	Birmingham – 30th / 31st March	All 5 themes

We are also running some smaller discussion groups in each of the 5 areas. These will be with specific groups – for example, recovering drug addicts, people with mental health problems, young people etc

As you can see from the table above, *drugsfutures* is organised around 5 themes. Brainbox is the only event that looks in detail at all of these themes. In the second part, we will feedback to you some of the things that people have told us at the workshops around the country. This will give you an idea of what other people think about the issues. We will use the findings from the workshops to help us plan the second part of the Brainbox.

At the end of Brainbox, we will develop a set of principles and recommendations that we think should underpin future developments in brain science and drug technologies.

What is Brainbox?

Brainbox is an opportunity for a small group of citizens to focus in some detail on the questions we will need to address in the future, as a result of our increasing knowledge.

Over the 3 ½ days of Brainbox, you will be able to learn about what scientists know about the brain and about new drugs that might be developed in the future. These might be drugs for people with mental health problems, drugs that make you smarter or 'recreational' drugs.

Brainbox is organised around one main question:

Scientists are learning more about the brain and able to develop new and different drugs for a range of purposes. What principles and rules should guide these developments?

Over the next 3 days, you will have an opportunity to hear from – and question – experts, including brain scientists, police, people working in the drugs field and mental health workers. We will give you some background information and some future scenarios to help you think about the issues.

Your views are the most important resource for this event. The background information and experts are there to help you develop your views and answer any questions you have.

Brainbox takes place on:

Friday 2nd February – 6.30pm – 9.00pm
Saturday 3rd February – 9.45am – 4.30pm
Friday 30th March – 9.45am – 4.30pm
Saturday 31st March – 9.45am – 4.30pm

Every participant will get £250 for giving up their time and energy to this project. You will get £50 at the end of the first Part (on Saturday 3rd February) and £200 at the end of Part 2.

If you have any questions about anything to do with this event, please talk to one of the facilitators – Diane, Robin or Nina.

Participants' Agenda

The question we will answer over 3 ½ days is:

Scientists are learning more about the brain and able to develop new and different drugs for a range of purposes. What principles and rules should guide these developments? What kind of drug culture do we want for our future?

Friday 2nd February – 18.30 – 21.00

18.30 – 19.00	**Welcome and Introductions**
19.00 – 19.20	**Small group discussions** – What are the different reasons why people use drugs that affect their brains? – What influences the way we think about drugs?
19.20 – 19.45	**Feedback on small group discussions**
19.45 – 20.00	***BREAK***
20.00 – 20.35	**What harms do drugs cause?**
20.35 – 20.50	**Some background information to the project**
20.50 – 21.00	**Overview of tomorrow's agenda** – Questionnaires – Any questions **Close**.

Saturday 3rd February – 9.45 – 16.30

9.45 – 10.00	Coffee & registration
10.00 – 10.15	**Welcome – Robert Frost, Project Manager, Academy of Medical Sciences**
10.15 – 11.00	**Drugs and mental health**
	Presentation from Professor Phil Cowen, University of Oxford
	Questions and discussion
11.00 – 11.15	***BREAK***
11.15 – 12.15	***Discussion in small groups***
	What are your views on the scenario?
	What positive things does it suggest about the future?
	What concerns does it raise about the future?
	What additional information do you need to help you answer the questions?
12.15 – 13.00	**Whole group discussion**
	Feedback on your small group discussions
13.00 – 13. 45	***LUNCH***
13.45 – 14.05	**Our attitudes towards mental health in the future**
	How will these attitudes affect our views of drugs for mental health?
14.05 - 15.00	**Small group discussions**
	Drugs and young people
	Drugs for a smarter brain
	Drugs and the law
15.00 – 15.15	***BREAK***
15.15 – 15.45	**Whole group discussion**
	Feedback on issues raised in small groups
15.45 – 16.15	**Whole group**
	• Agreements, differences and questions
16.15 – 16.30	**Closing session**
	• Diaries, incentives and questions

Introduction to the Academy of Medical Sciences

The Academy of Medical Sciences promotes advances in medical science and campaigns to ensure these are translated as quickly as possible into healthcare benefits for society. The Academy's eight hundred Fellows are the United Kingdom's leading medical scientists from hospitals, academia, industry and the public service.

The Brain Science, Addiction and Drugs project

The UK Government has asked the Academy of Medical Sciences to undertake an independent review of the issues raised in the Foresight report, 'Drugs Futures 2025?'

An Academy working group has been convened to consider, in consultation with experts and the public, issues around three types of substance:

- illegal and legal 'recreational' drugs;
- medicines for mental health; and
- a category of substances termed 'cognition enhancers' that might enhance the performance of the 'healthy' brain in specific ways, such as enhancing short term memory or speed of thought.

This study will end with an Academy report, to be published by the end of 2007, which will include recommendations for public policy and future research needs.

Public and stakeholder engagement

The Academy's study will be informed by a 'call for submissions' and a national programme of public engagement.

Public engagement update:

The public engagement programme will provide an opportunity for a broad cross-section of the public to discuss their hopes and concerns around current and future developments in this area.
The public engagement programme – *drugsfutures* - includes online and workshop elements. Drugsfutures will be launched at the Dana Centre, Science Museum on the evening of the 31 January.

The public engagement programme is funded by the Department of Trade and Industry's Sciencewise programme and will be managed and delivered by a consortium led by the Office for Public Management.

Stakeholder engagement – call for submissions

The Academy invites written submissions from interested organisations or individuals (e.g. charities, research funders, health professionals, patient groups etc) on what they feel are the key issues raised in 'Drugs Futures 2025?'

The AMS project is being overseen by a Working Group.

Members of the Working Group are:

Professor Sir Gabriel Horn FRS (Chair)
Chair, Cambridge University Government Policy Programme, University of Cambridge.
Professor Jacqueline Barnes
Professor of Psychology, Institute for the Study of Children, Families & Social Issues, Birkbeck, University of London.
Professor Roger Brownsword
Professor of Law, King's College London.
Professor JF William Deakin FMedSci
Professor of Psychiatry, Neuroscience and Psychiatry Unit, University of Manchester.
Professor Ian Gilmore
Consultant Physician & Gastroenterologist, Royal Liverpool University Hospital, and Honorary Professor of Medicine, Liverpool University.
Dr Matthew Hickman
Senior Lecturer in Public Health, Department of Social Medicine, University of Bristol.
Professor Leslie Iversen FRS
Professor of Pharmacology, Oxford University.
Professor Trevor Robbins FRS FMedSci
Professor of Cognitive Neuroscience, Department of Experimental Psychology, University of Cambridge.
Professor Eric Taylor FMedSci
Professor of Child & Adolescent Psychiatry, Institute if Psychiatry, King's College London.
Professor Jonathan Wolff
Professor of Philosophy, University College London.

Terms of Reference:

The remit of the Working Group is to:
Consider, in consultation with experts and the public, the societal, health, safety and environmental issues raised in the Foresight report ‘Drugs Futures 2025?’.
Report back to the Department of Health and other Government Stakeholder Departments with recommendations for public policy and research needs.
In the course of the consultation, consider the Government’s policy priorities in this area.

Introductory presentation

WELCOME TO BRAINBOX

The *drugsfutures* project

- Commissioned by the Academy of Medical Sciences
- Funded by the government's Department of Trade and Industry *Sciencewise* programme
- Face-to-face discussions with the public
- On-line consultation
  - www.drugsfutures.org.uk
- Findings reported to the government end of 2007

THE BRAINBOX QUESTION

Scientists are learning more about the brain and able to develop new and different drugs for a range of purposes. What principles and rules should guide these developments? What kind of drug culture do we want for our future?

What does Brainbox involve?

- Discussion, debate, hearing from and grilling the experts
- 5 themes
  - Drugs and mental health
  - Drugs and the law
  - Drugs and young people
  - Drugs for a smarter brain
  - Drugs and society
- Develop recommendations and underlying principles for our future drug culture
- Present recommendations to Working Group member at end of Part 2

Any questions?

Summary of Brainbox – Part I

This summary of findings from Brainbox 1 was sent to participants in that event, to check that they were happy with the way we were representing the main points.

Most people decided to take part in this event because they were interested in the subject matter. Some were concerned about the future world in which their children would like; others had personal knowledge of the impact of mental health problems, from their own experiences or those of friends or family members.

People suggested a variety of reasons for use of drugs that affect the brain, Some were seen as legitimate – for example, treating mental health problems or alleviating stress, helping you sleep or . Other reasons were seen as more problematic. Experimenting with drugs was generally frowned upon. However, some people felt 'recreational' drugs were sometimes used to address underlying problems.

- Lack of education: need more to get through to youngsters
- Can get addicted to paracetemol
- Would come a time when you don't know who you are – or who you are talking to
- Some people really do need to take drugs

Influences on our attitudes towards drugs

The **media** were seen as a major influence on attitudes towards drugs. Their coverage of drug issues is seen as inconsistent. The example of Kate Moss was used to illustrate the way in which the media will, at one time, expose and disapprove of drug use and later appear to 'pretend it never happened'.

Peer pressure was seen as particularly influential on younger people, who feel the need to fit in with their friends. Seeing friends using drugs without apparent harm was felt to undermine educational messages and encourage use.

Advertising was seen as both a negative and positive influence. Drinks advertising was seen as a potential influence on young people's consumption, whilst commercials showing the harm of tobacco use and the dangers of drink driving were seen as possibly helping to reduce use.

Information from **drug manufacturers** was seen by some as a potential influence on attitudes towards prescribed and non-prescribed drugs. Some people suggested they would not necessarily trust this information, since it would be in the interests of the manufacturer to sell or have prescribed as much of their product as possible. However, others pointed out that if you were very ill, your concern would be with getting well, rather than industry profits – in which case you were less likely to read the information at all.

The **personal experiences** of family and friends might also influence attitudes. Seeing someone with depression get well as result of a particular medication or seeing someone suffering from side-effects might influence your own decisions in the future.

Finally, the **internet** is seen as an increasingly important source of information and influence. Some participants said they went to NHS Direct to read up on prescribed drugs. What support do GPs get from drug companies?

Ethical or **religious** factors were seen as influencing attitudes towards drug research and development processes. A few participants suggested that knowing that stem cell research had contributed towards the development of a particular drug might impact on your views of that drug.

Thinking about the future

The groups looked at a range of different scenarios. Some common issues were raised by all groups, including:

Concern over what is seen as a growing 'quick fix' society: many feel we take drugs too easily for problems which may be better solved by other means – for example, counselling or other types of support

Issues raised related to decision-making; who has the final word in whether a pharmacological intervention is the right approach, in any situation?

More information

Many participants felt that they needed further information in order to answer the overall questions. Specific information requested included:

- Are some people more prone to addiction than others?
- What are the financial cots of treating patients in the community rather than in institutions?
- Are hospices available to treat patients?
- How are patients assessed as being safe to return to the community?
- What does the genetic test involve?
- To what degree is bipolar disorder genetics?
- If you took cognition enhancers (smart pills), what might the side effects be?
- What would the impact of cognition enhancers be on people's 'natural' abilities – will they impact on the 'normal' development of the brain?
- Will use of cognition enhancers lead to the creation of a 'super race'?
- What about the impact on the economy of a mentally agile but physically aged population – eg, on pensions?
- Are we already taking cognition enhancers – eg, in caffeine/tobacco/food?

- Are cognition enhancers already being developed for future use – eg, by drug companies or the government?
- Will there be additional funding in the future for taking care of people who have dementia, Parkinson's Disease, Multiple Sclerosis or Alzheimer's Disease?

Summary of key findings from workshops and outreach groups.

This summary of key points was sent to Brainbox participants, before the second stage. It covers points emerging from our initial analysis of views expressed in the workshops and outreach groups. The purpose was to give them insight into the main points raised by all participants. Part of their task in Brainbox 2 was to consider these wider views when developing their hopes, concerns and priorities.

This report presents the main themes from 5 workshops held around the UK:

- Liverpool: Drugs and the Law
- Exeter: Drugs and Society
- Glasgow: Drugs for a smarter brain
- Belfast: Drugs and young people
- Merthyr Tydfil: Drugs and mental health

The findings have been organised around the three drug types that we are looking at:

- Drugs for mental health
- Recreational drugs
- Cognition enhancers

The focus of Brainbox, Stage 2, will be to look at the findings from these workshops and develop recommendations which take into account the views of people from the workshop and your own views. We will need to consider how attitudes towards these issues might change in the future.

We suggest that the recommendations fall under four main categories:

- Recommendations for further research
  - This could be scientific research or other forms of research that you think might be of value
- Recommendations for other services / resources required
- Recommendations for education or information
- Recommendations around control and regulation

Drugs and Mental Health

Main findings:

- Mental health problems are seen differently to problems with physical health, primarily because they are 'invisible', both physically and socially
  - There is a stigma attached to having a mental health problem
  - Media stereotypes of people with severe mental health problems make it seem as though they are all dangerous
  - Having a mental health problem can mean that all your behaviour is explained in terms of that problem
- People think that an increasing number and range of conditions are being seen as mental health problems and that drugs are used to treat these conditions
  - This is seen as part of a general tendency to use drugs to solve all problems, rather than other forms of support or treatment
  - There is concern that the definition of 'normal' is becoming more and more narrow and that we will gradually eliminate the creativity and diversity within the population
- Some people think that mental health drugs are used to 'quieten down' people so that they are less trouble and less disturbing to society
  - They feel that this can lead to more drugs than necessary being used or drugs that are not best suited to a particular patient's needs

'They dope you up to keep you quiet so they can have a quiet life.'

- The use of drugs for treating mental health problems needs to be done with more care
  - People with severe mental health problems recognise how valuable drugs are for stabilising their condition
  - However, other forms of treatment should be available as well
  - The side effects of mental health drugs can be very bad
- There is a debate about the ease with which people receive drug treatment for mental health problems
  - Some people say you can just go to your doctor and say you're 'feeling down' and the doctor will give you anti-depressants
  - Other people say that you have to be in crisis before you get the appropriate treatment
- There is a debate about what the consequences might be of early diagnosis of mental health problems
  - Some people say this will mean treatments and/or support can be offered that will help the person
  - Others think this might lead to the person being labelled and that this will impact on how others see them

  - Some people think that people use a diagnosis of depression, for example, as an excuse for 'shirking'

- There is some resistance to the idea of a vaccine that would prevent mental health conditions
  - Many people feel that, whilst there may be benefits if it was possible, mental health problems are often complex, with people suffering from more than one condition

'You never ever suffer from just one mental health problem, so a vaccine isn't the way forward – you can be diagnosed with lots of different things.'

- Many people with mental health conditions use illegal drugs to alleviate their distress or pain
  - Services are not adequate for people with mental health conditions who are also using illegal drugs
- There is a growing number of 'internet aware' consumers who may buy drugs over the internet and self-medicate
- A majority of people think that a wider range of non-drug treatments and support should be available for people with mental health problems
- At present, treatment services for people with mental health problems are not seen as adequate
  - The environmental (family situation, work, homelessness or other things) need to be addressed as well as the illness itself
  - Having activities to keep the mind occupied is important for people with mental health problems
  - The quality and availability of services varies depending on where you live and who is delivering them
  - People in rural areas in particular may find it hard to get the support they need
- Young people with Attention Deficit Hyperactivity Disorder (ADHD) may use illegal drugs because they are readily available in their peer group
  - Children and young people with ADHD need educational support to stay in mainstream education and this is very difficult to get and of varying quality

Recreational drugs

- The drug classification system is seen as confused and inconsistent
  - The underlying rationale behind the drug classification system is unknown
  - The way drugs are classified does not seem to relate to the harms of the drugs
  - The legal penalties seem to be irregularly enforced
  - Alcohol is one of the most harmful drugs, to both individuals and society; most people think it is about as harmful as heroin

  - Some people argue that prohibition should end and that drugs should be sold under licence on a not-for-profit basis

- When asked what should be done to discourage young people from using illegal drugs, many people call for more drugs education
  - However, in its current form, drugs education is not seen as very effective
  - Knowing that something is harmful to you does not necessarily mean that you change your behaviour accordingly
- Education through peer groups and involving drug users may be more effective
  - Young people's views are very influenced by their peer groups
  - Delivering information and education in settings outside school may be more readily accepted
- Young people say that adults are hypocritical in their attitudes towards drugs
  - They know alcohol is more dangerous than many recreational drugs but continue to use it
  - They use alcohol and nicotine but tell their children not to take recreational drugs

'You can tell when the teachers have a hangover - there they are, with their Lucozade.'

- Testing people for genetic vulnerability to drug addiction is not seen as a useful step forward in reducing drug use and addiction
  - Some people question what value the information would be, since people know already that some drugs are addictive but still use them
  - Some people suggest that characterising addiction as a physical problem may lead to it being seen as a disability
  - Some feel that if a parent knew their child was vulnerable to addiction, they would become over-protective
  - Many people fear that the information about someone's genetic vulnerability to addiction could not be kept secret and that employers and insurance companies may gain access to it
- People are also resistant to the idea of an 'anti-addiction' vaccine for use on babies identified genetically as vulnerable to addiction,
  - Starting and stopping use of recreational drugs is seen by most people as a choice and a great majority of participants think that this choice should remain open to people
  - Some people suggest that overcoming addiction may have positive consequences for an individual
  - Vaccinating babies against addiction is seen as limiting their future freedom of choice

'Using a vaccine for babies is trying to treat something that hasn't happened and might never happen.'

- Some people say that the major harm arising from recreational drug use arises from their illegal status
  - They argue that the majority of people using recreational drugs do no harm to themselves or others

Cognition enhancers

- People see cognition enhancers as valuable for people with specific conditions such as Alzheimer's Disease and dementia
  - They feel that more research into these uses would be very beneficial, especially with an ageing population and Alzheimer's becoming more prevalent amongst younger people
- The use of cognition enhancers by the general population, to improve their concentration or memory, is seen as a 'quick fix'
  - They are seen as devaluing the process of learning and motivation
- People feel that using non-drug methods of enhancing your cognition are more beneficial
  - These include improving your diet or doing puzzles and other 'brain teasers'
- Some people fear that cognition enhancers might be used as a way of controlling behaviour, rather than improving cognition
  - This was a particular concern in schools
  - Some parents feel that Ritalin is already being used to control the behaviour of children with ADHD, rather than putting the proper educational support measures in place
- There is concern that the availability of cognition enhancers on the market (eg, at the supermarket or chemists) would increase social inequalities
  - People felt that those with a higher income would have greater access to cognition enhancers whilst poorer people would not be able to afford them
- Parents of children with ADHD were very concerned about the impact of Ritalin being unavailable for young people over age (18)
  - Many feel that the sudden withdrawal of one form of medication could lead to the use of recreational drugs in its place.

Brainbox 2: Facilitators Agenda

Friday 30th March – 9.45am to 16.15pm

9.45 – 10.00 Coffee & registration

10.00 – 10.30 **Welcome – (OPM, then immediate introduction of Robert Frost, AMS)**

1. AMS: How important the public engagement work has been to the WG; how important the work of Brainbox is to developing priorities based on what the public has been telling us: anything on the value to the government of this kind of work? What will happen to the findings.

OPM: Any questions for AMS?

1. **Business**

Introduce experts/observers/media

Explain that the experts will join us later in the day for panel sessions on each of the drug types

- Mobiles, fire escapes, alarms, toilets
- any questions, please ask a facilitator.

2. Brief discussion of any media coverage etc participants have seen since Stage 1

3. **Overview of the 2 days (presentation**

- Focus: agenda and information logs
- Consent forms
- Any questions?

4. **Show launch film**

10.30 – 11.15 **Small group discussions: (20 minutes)**

Revisit the main themes

- Cognition enhancers
- Recreational drugs
- Mental health drugs
- By Drug Type: Review findings from previous Brainbox and from Workshops: what do you find interesting / what do you disagree with/agree with

- What issues do you think are missing from the summaries that it is important for us to consider?

Plenary: Each group to report back on their discussion: develop a single flip that records all the key points

11.15 – 11.30 ***BREAK***

11.30 – 12.30 **Theme 1: cognition enhancers**

1) Preparation for the session: people are to work in small buzz groups (3/4 per group) to develop questions that are related to the tasks in their information log book (10 mins)

2) Presentation (10-15 mins):

- Dr Danielle Turner, University of Cambridge: *An introduction to cognition enhancers*
- Dr Rebecca Roache, Future of Humanity Institute: *The ethical issues of cognition enhancement*

3) Q&A and discussion (15-20 mins)

4) Review and main points of learning (10 mins)

12.30– 13.15 ***LUNCH***

13.15 – 14.15 **Theme 2: recreational drugs**

1) Preparation for the session: people are to work in buzz groups (3/4 per group) to develop questions that are related to the tasks in their information log book (10 mins)

Presentations (10-15 mins):

- Daren Garratt: UK Harm Reduction Alliance – *Harm reduction and how it is different to other approaches*
- Relay Project, Merseyside: **Keri Tozer** (Team Leader) and **Sue Garnett** (Project Volunteer) *A view on the future of recreational drugs and how we can control it from a ex-user's perspective*

3) Q&A and discussion (15-20 mins)

4) Review and main points of learning (10 mins)

14.15 – 14.30 ***BREAK***

14.30 – **Theme 3: mental health**

15.30	1) Preparation for the session: people are to work in buzz groups (3/4 per group) to develop questions that are related to the tasks in their information log book (15 mins) 2) Presentations (10 mins) • Robin Felton, Branch Manager, Alzheimer's Society, Birmingham and Solihull: *Making a difference in dementia care* • Rebecca Swift, Mental Health Promotion Project Officer, Birmingham and Solihull Mental Health Trust: *Promoting positive awareness of mental health issues* 3) Q&A and discussion (25 mins) 4) Review and main points of learning (10 mins)
15.30 – 16.00	**Panel session with experts:** Review main issues in each theme and initial discussion of priorities through a question and answer session : Session facilitator: What are the common themes that run through all the presentations that we've heard? What do you think are the values that underpin the issues we think are important? • Cognition enhancers • Mental health • Recreational drugs • Review and main points of learning
16.00 – 16.15	**Closing session** Brief overview of focus for tomorrow Any questions – Thanks and close

Saturday 31st March - 9.45am to 16.00pm

9.45 – 10.00	Coffee & registration
10.00 – 10.15	**Tasks for the day** • Presentation and any questions
10.15 – 11.00	**Theme 1: Cognition Enhancers: development of detailed priorities** **3 small groups: using the discussion logs, identify the consensus/majority view and develop agreed priorities, with rationale for priorities, under each of the 4 headings:** • Benefits and hopes • Concerns • Research needed

- Control and regulation (when looking at control and regulation, don't just focus on the law: ask them to consider what other ways we regulate behaviour –eg, social norms and pressures, expectations of those around us, what's considered 'usual' or 'accepted' more widely or amongst our peers etc)

To work in three small groups, basing discussion on information logs, to identify consensus/majority view. Each group to begin completing the boxes at the end of their logs.

Facilitator: try to ensure that your group doesn't just create a 'wish list':
How might these priorities impact on different people (younger, older, people with mental health problems, richer, poorer, drug users etc)
Why do you think these things are important? Explore underlying reasons for their priorities (this will help in the development of principles for a future drug culture)

Plenary: Come back to discuss and finalise priorities, to generate a single response to each box on the sheet.

- Task set-up (5 mins)
- Small groups (20 mins)
- Plenary (20 mins):

By close of session, need to have an agreed list of priorities under the 4 headings. Question participants about the principles that underpin these priorities.

11.00 – 11.15 ***BREAK***

11.15 – 12.05 **Theme 2: Recreational drugs: development of priorities**

3 small groups: using the discussion logs, identify the consensus/majority view and develop agreed priorities, with rationale for priorities, under each of the 4 headings:

- Research needed
- Services and Resources
- Education and information
- Control and regulation (when looking at control and regulation, don't just focus on the law: ask them to consider what other ways we regulate behaviour –eg, social norms and pressures, expectations of those around us, what's considered 'usual' or 'accepted' more widely or amongst our peers etc)

To work in three small groups, basing discussion on information logs, to identify consensus/majority view. Each group to begin completing the boxes

at the end of their logs.

Facilitator: ensure that your group doesn't just create a 'wish list':
How might these priorities impact on different people (younger, older, people with mental health problems, richer, poorer, drug users etc)
Why do you think these things are important? Explore underlying reasons for their priorities (this will help in the development of principles for a future drug culture)

Plenary: Come back to discuss and finalise priorities, to generate a single response to each box on the sheet.

- Task set-up (5 mins)
- Small groups (20 mins)
- Plenary (20 mins):

By close of session, need to have an agreed list of priorities under the 4 headings. Question participants about the principles that underpin these priorities.

12.00 – 12.45

Theme 3: mental health drugs: development of priorities

3 small groups: using the discussion logs, identify the consensus/majority view and develop agreed priorities, with rationale for priorities, under each of the 4 headings:

- Research
- Services and resources
- Education and information
- Control and regulation (when looking at control and regulation, don't just focus on the law: ask them to consider what other ways we regulate behaviour –eg, social norms and pressures, expectations of those around us, what's considered 'usual' or 'accepted' more widely or amongst our peers etc)

To work in three small groups, basing discussion on information logs, to identify consensus/majority view.

Facilitator: try to ensure that your group doesn't just create a 'wish list':
How might these priorities impact on different people (younger, older, people with mental health problems, richer, poorer, drug users etc)
Why do you think these things are important? Explore underlying reasons for their priorities (this will help in the development of principles for a future drug culture)

Plenary (20 mins): by close of session, need to have an agreed list of priorities under the 4 headings. Question participants about the principles that underpin these priorities

- Task set-up (5 mins)
- Small groups (20 mins)
- Plenary (20 mins)

By close of session, need to have an agreed list of priorities under the 4 headings. Session facilitator to explore the principles that underpin these priorities (eg, freedom of choice or protection of wider society)

12.45 – 13.30 ***LUNCH (Facilitators to complete ppvote content)***

13.30 – 14.15 **PP Vote**

Trade-offs and priorities, based on group discussions/priorities identified

14.15 – 14.30 ***Break***

14.30 - 15.00 **4 task groups: each to prepare presentation on one theme each: Facilitator to work with each group:**

- Cognition enhancers – underlying principles, hopes, concerns and priorities in three areas (research, education/information and services/resources)
- Mental health - underlying principles, hopes, concerns and priorities in 3 areas (research, education/information and services/resources)
- Recreational drugs - underlying principles, hopes, concerns and priorities in 3 areas (research, education/information and services/resources)
- Other issues, including control and regulation - underlying principles, hopes, concerns and priorities (eg, principles might be: take a law enforcement approach or take a harm reduction approach; focus on reducing supply or demand? Are there other ways we can control drug use besides using the law – eg, social pressures on behaviour; decriminalise or remove prohibition etc?

15.00 – 15.30 **Presentations to AMS**

15.30 – 16.00 **Brief reflection on the process**

Thank you and close

Evaluation questionnaires
Incentives

Participants Agenda - Brainbox 2

Friday 30th March, 9.45-16.15

9.45 – 10.00	Coffee & registration
10.00 – 10.30	**Welcome – introductions and objectives** Background and project work to date Overview of agenda and explanation of the 2 days activities General discussion: media coverage of the issues, diary-keeping
10.30 – 11.15	**Revisiting the main themes: background issues and findings** • **Cognition enhancers • Recreational drugs • Mental health drugs** What do you find interesting about the workshop findings? What do you agree with? What do you disagree with? What issues do you think are missing from the summaries that it is important for us to consider?
11.15 – 11.30	***BREAK***
11.30 – 12.30	**Theme 1: cognition enhancers** Talks and question and answer session: • Dr Danielle Turner, University of Cambridge: *An introduction to cognition enhancers* • Dr Rebecca Roache: Future of Humanity Institute, University of Oxford *The ethical issues of cognition enhancement'*
12.30– 13.15	***LUNCH***
13.15 – 14.15	**Theme 2: recreational drugs** Talks and question and answer session: • Daren Garratt: UK Harm Reduction Alliance. 'Harm reduction and how it is different to other approaches' • Keri Tozer (Team Leader) and Sue Garnett (Project Volunteer), Relay Project, Merseyside: *A view on the future of recreational drugs and how we can control it from an ex-user's perspective*
14.15 – 14.30	***BREAK***
14.30 – 15.30	**Theme 3: mental health** Talks and question and answer session: • Robin Felton, Alzheimer's Society, Branch Manager, Birmingham and Solihull *Making a difference in dementia care* • Rebecca Swift, Mental Health Promotion Project Officer, Birmingham and Solihull Mental Health Trust: *Promoting positive awareness of mental health issues*
15.30 – 16.00	**Review of the panel discussions and initial priorities** What, if any, are the common themes that run through all the presentations

	that we've heard? What do you think are the values that underpin the issues we think are important?
16.00 – 16.15	**Closing session**

Saturday 31st March, 9.45-16.00

9.45 – 10.00	Coffee & registration
10.00 – 10.15	**Introduction to the day and review of Day 1**
10.15 – 11.00	**Cognition enhancers: developing our priorities** • Benefits and hopes • Concerns • Research needed • Control and regulation/other issues to be considered How might your views impact on people who are different to you? Why do you think these things are important?
11.00 – 11.15	***BREAK***
11.15 – 12.00	**Recreational drugs: developing our priorities** • Research needed • Services and resources • Education and information • Control and regulation/other issues to be considered How might your views impact on people who are different to you? Why do you think these things are important?
12.00 – 12.45	**Mental health drugs: developing our priorities** • Research needed • Services and resources • Education and information • Control and regulation/other issues to be considered How might your views impact on people who are different to you? Why do you think these things are important?
12.45 – 13.30	***LUNCH***
13.30 – 14.15	**Voting session – your individual views**
14.15 – 14.30	***Break***
14.30 -	**Preparing presentations on the main themes**

15.00	• Cognition enhancers • Mental health • Recreational drugs • Other issues, including control and regulation
15.00 – 15.30	**Presentation to Academy of Medical Sciences followed by discussion**
15.30 – 16.00	**Thank you and close** Complete evaluation questionnaires and pick-up incentives

Opening Presentation

WELCOME TO BRAINBOX

Stage 2
30th-31st March 2007

The *drugsfutures* project

- Commissioned by the Academy of Medical Sciences
- Funded by the government's Department of Trade and Industry *Sciencewise* programme
- Face-to-face discussions with the public
- On-line consultation
  - www.drugsfutures.org.uk
- Findings reported to the government end of 2007

THE BRAINBOX QUESTION

Scientists are learning more about the brain and able to develop new and different drugs for a range of purposes. What principles and rules should guide these developments? What kind of drug culture do we want for our future?

What have we done so far?

- Face-to-face work
  - Launch event - London
  - 5 workshops
    - Liverpool - Drugs and the law
    - Exeter - Drugs and society
    - Glasgow - Drugs for a smarter brain
    - Belfast - Drugs and young people
    - Merthyr Tydfil - Drugs and mental health
- On-line consultation – closes 2nd April
- Over 500 participants
- Developed an overview of people's hopes and concerns and the general debates around the three drug types:
  - Cognition enhancers; recreational drugs; mental health drugs

What will we do over the next 2 days?

- Day 1
  - Focus on 3 drug types
    - Recreational drugs
    - Cognition enhancers
    - Mental Health drugs
  - Hear talks from speakers, question and discuss issues
  - Review findings from the workshops
  - Gather information
- Day 2
  - Answer the question!
  - Develop priorities and underlying principles for our future drug culture
  - Present recommendations to the AMS at end of Part 2

In your packs

- Agenda
  - So you know what we're covering over the next 2 days
- Information log
  - To record key points, questions, ideas and views, to use as a basis for developing priorities on Saturday
  - You can ask the experts the questions in your log, to get their views
- Briefing notes and scenarios (as used in Stage 1)
  - Background information to help you with your discussions
- Summary of findings from Brainbox Stage 1
  - To remind you of our previous discussions
- Overview of workshop findings
  - Summary of key points made by workshop participants
- Consent forms
  - To allow us to use your image and comments, in publicity or other material associated with this project
- Information sheet
  - Contact details for some useful organisations
- Evaluation questionnaire
  - To tell us what you thought of the event

OPM

Any questions?

OPM

OPM

Information Logs

Individual participants in Brainbox 2 used these to keep notes, answer questions and express their hopes, concerns and priorities, based on the discussions they had over the course of Brainbox and the feedback on findings from the workshops and outreach groups.

The size of the answer boxes was larger in the Logs provided to participants: they have been reduced to save space and paper.

Mental health drugs – Information Log

1. The incidence of mental health problems in this country is rising. What are some of the ways we should deal with this in the future? (This could be developing treatments for specific conditions through to wider social issues.)

2. Are drugs the most effective or appropriate treatments for all mental health problems, from mild depression to more severe problems? If not, what else should we do?

3. What might the benefits and disadvantages be of a blood test that told us if someone was particularly vulnerable to mental health problems?

Benefits
Disadvantages

4. As new and more effective treatments are becoming available for diseases associated with ageing, such as dementia and Alzheimer's Disease, we will have more older people in society who are mentally alert. What might be the issues of balancing mental well-being with the physical effects of ageing?

5. How do you think we could reduce the stigma attached to mental health problems?

6. How do we balance the needs of different groups in society when deciding which areas of mental health we should focus on (eg, younger people, older people, people of working age, etc)?

7. What is the most appropriate approach to take towards people using recreational drugs who also have mental health problems?

Use this box to record any other questions or comments you have about recreational drugs, or the views of the experts or other people in the group that you think are important. Note down any additional issues or questions you think we need to consider.

Mental health - priorities

Research priorities
Priorities for services improvement/new services
Priorities for education and information
Other issues

Recreational drugs – Information Log

1. What do you think are the benefits and disadvantages of the following approaches to take to the use of recreational drugs? (This assumes the person has not committed any crime other than using illegal drugs.)

Sending people to prison	
Benefits	*Disadvantages*
Providing health and other treatment to reduce the harm of using recreational drugs or help to overcome addiction	
Benefits	*Disadvantages*

2. Should adults have the freedom to use recreational drugs? If so, in what circumstances? (Remember: alcohol and nicotine are recreational drugs that cause more harm than many drugs that are currently illegal.)

Benefits
Disadvantages

3. If we could develop a safe vaccine that prevents addiction, how do you think we should use it? For example, should it be available for all children, like TB and polio vaccinations? Or should only those people who are at risk of addiction have it? Or should we not use it at all?

4. Would revising the drug classification send out the wrong messages to people or would it give them a more accurate view of the relative harms of different drugs?

5. How do you think we should encourage young people not to use recreational drugs?

6. How do you think that drugs education could be improved? At the moment, it does not appear to be effective.

7. If a blood test could be developed that would tell us if a child or young person was vulnerable to addiction in the future, do you think that all children should take it or just those whose family and wider background suggest they might be at particular risk of using drugs in the future?

8. What support should be given to young people identified as being at increased risk of drug misuse?

Use this box to record any other questions or comments you have about recreational drugs, or the views of the experts or other people in the group. Note down any additional issues you think it is important for us to consider.

Recreational drugs - priorities

Research priorities
Priorities for services improvement/new services
Priorities for education and information
Other priorities (eg, control and regulation)

Cognition enhancers – Information Log

1. In what circumstances would it be appropriate to take a drug to enhance cognition? In competitive or non-competitive situations? For people with illnesses or to enhance the performance of the brain in 'healthy' individuals?

Appropriate use of drugs to enhance cognition
Inappropriate use of drugs to enhance cognition

2. What are the benefits and disadvantages of cognition enhancers for people with illnesses such as Alzheimer's Disease or dementia? (eg, Modafinil)

Benefits
Disadvantages

3. What are the benefits and disadvantages of cognition enhancers for children with Attention Deficit Hyperactivity Disorder? (eg, Ritalin)

Benefits
Disadvantages

4. If we develop safe and effective cognition enhancers, and these were available to buy from the chemists, what might the benefits and disadvantages be to the general public?

Benefits
Disadvantages

5. If cognition enhancers were available in drinks or food (like Red Bull), would that change your views towards them?

6. In what jobs, if any, should employees be allowed to use cognition enhancers? For example, to enhance concentration or speed of thought?

7. Do you think that children and young people should be allowed to use cognition enhancers in the future– for example, to help with exams or interviews?

Use this box to record any other questions or comments you have about cognition enhancers, or the views of the experts or other people in the group. Note down any additional issues or questions you think we need to consider.

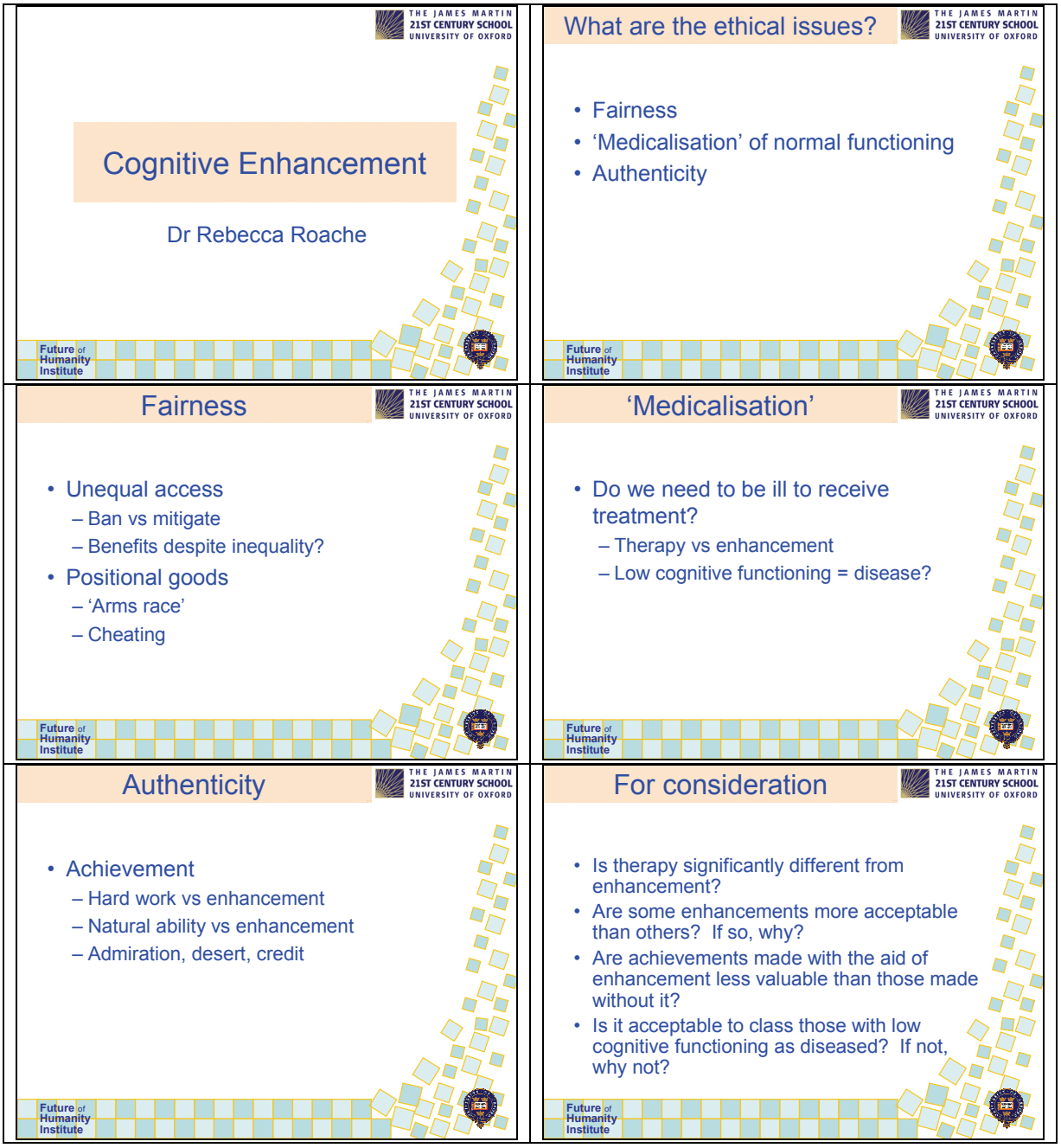
Cognition enhancers - priorities

Research priorities
Concerns that need addressing
Benefits that we could build on
Other issues (eg, control and regulation)

'Expert' speakers' presentations

Not all of the expert speakers involved in Brainbox 2 gave PowerPoint presentations.

Dr Rebecca Roache, Future of Humanity Institute, University of Oxford



Dr Danielle Turner, Department of Clinical Neurosciences, University of Cambridge

Memory enhancement through drugs

Dr Danielle Turner

UNIVERSITY OF CAMBRIDGE

Department of Experimental Psychology
Department of Clinical Neurosciences

30 March 2007

MRC Medical Research Council

wellcome trust

People want to be smarter …

- **Effective cognitive enhancement for patients**
  - Quality of life
  - Benefits to patient, family, society
- **Drugs as tools to investigate how the normal brain works**
- **To improve cognition in healthy individuals**
  For example
  - The military
  - Shift workers
  - Air traffic control …

Healthy Adults

Volunteers

Design

60 healthy male volunteers

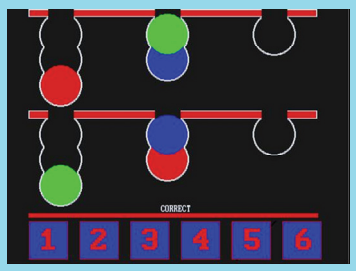
Placebo

Low dose 100 mg

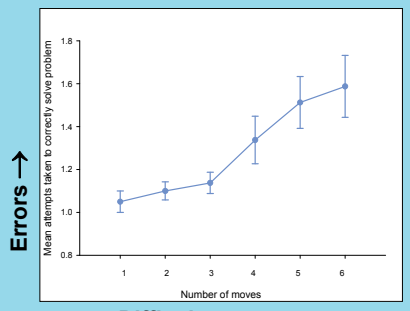
High dose 200 mg

• Approximately 25 years old, with an IQ of 115

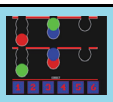
One-Touch Tower of London planning task

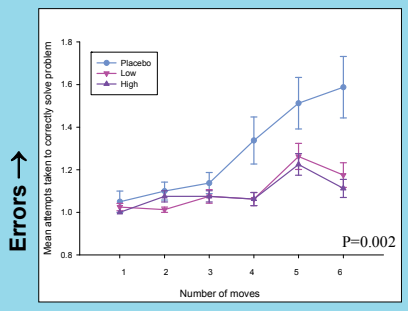


Planning in healthy, adult males



Improved planning - modafinil

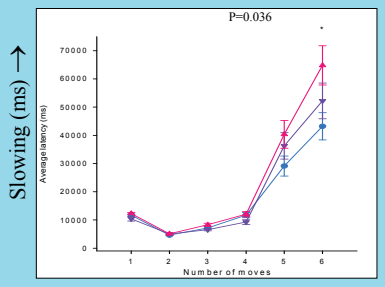




Improved reflection

Volunteers

Less cognitive impulsivity

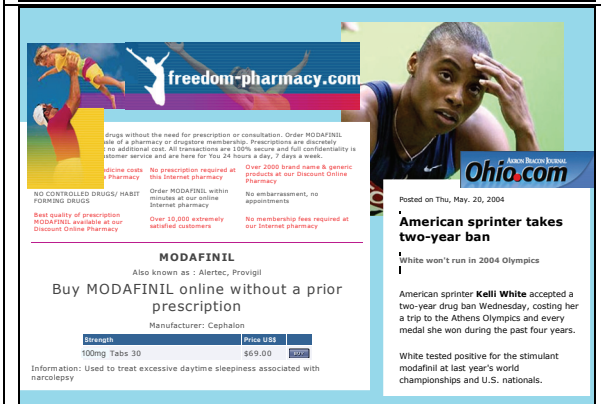


Healthy Volunteers

Summary of results

Volunteers

- Improved accuracy and increased reflection
  - Verbal memory
  - Visual memory
  - Planning
- Improved motor inhibition
- Unaffected simple motor responding
- No impairments (unlike dopaminergic drugs)



… 'neuroethics' of cognitive enhancement

Neurocognitive profile of ADHD

	Child ADHD	Adult ADHD	Effects of Ritalin
Response inhibition	↓	↓	↑
Planning	↓	↓	↓
Working memory	↓	↓	↑

↑ Improved performance
↓ Impaired performance

Impaired

Mehta et al 2003 JCPP, Aron et al 2003 Biol Psych, McLean et al 2003 Psych Med

Schiz.

Design

Twenty patients

Schizophrenic patients

IQ average 110

Average age 42

On antipsychotic medication (atypicals)

- Cross-over, double-blind, randomised, placebo-controlled study
- 200 mg dose of modafinil

ADHD SUMMARY

ADULT ADHD

Same effects as in healthy volunteers

- Improved accuracy and increased reflection
  - Verbal memory
  - Visual memory
  - Planning

PLUS: Improved decision-making, sustained attention and spatial memory

- Improved motor inhibition
- Unaffected simple motor responding
- No impairments (unlike dopaminergic drugs)

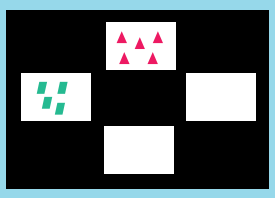
Numerous patient groups suffer from cognitive impairment

- Attention deficit hyperactivity disorder (ADHD)
- Schizophrenia
- Age-related c… decline
- Brain inj…
- Frontal dementia
- Depression / Bipolar disorder
- Obsessive Compulsive Disorder
- Drug abuse / addiction
- Huntington's and Parkinson's diseases
- Autism
- People with sleep deprivation

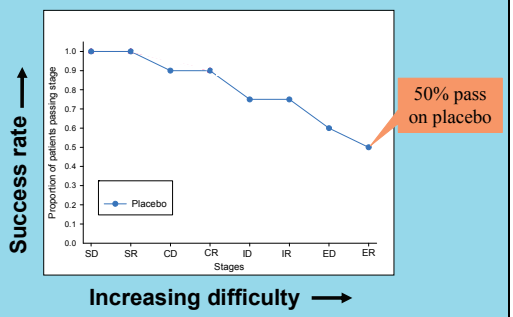
Degree of cognitive impairment predicts quality of life

Cognitive flexibility

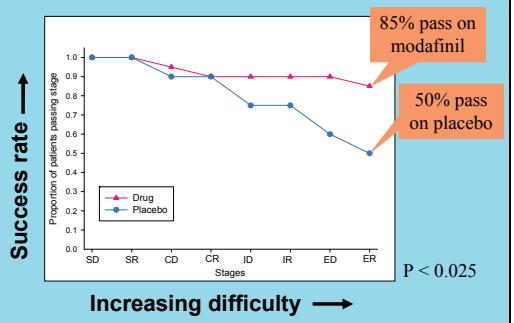
Adapting to change



Cognitive flexibility is impaired in patients with schizophrenia



Modafinil normalises cognitive flexibility in patients with schizophrenia



SCHIZOPHRENIA SUMMARY

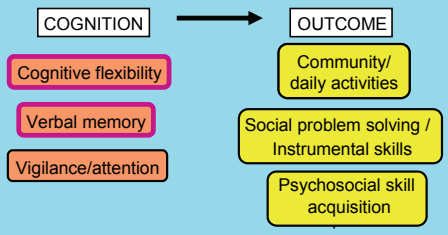
SCHIZ.

Similar effects to healthy adults and ADHD

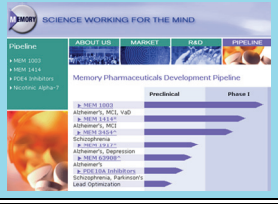
- Improved accuracy and increased reflection
  - Verbal memory
  - Visual memory (trend)
  - Planning (trend)
- Unaffected simple motor responding
- No impairments (unlike dopaminergic drugs)

PLUS: Improved cognitive flexibility

Cognitive deficits are related to patient outcome



Green et al 2000



Future cognitive enhancing treatments …

"40 potential cognitive enhancers are currently in clinical development"

- NeuroInvestment 2005

What if you were forced to take a cognitive enhancer?

Acknowledgements

Prof. Barbara Sahakian
Prof. Trevor Robbins

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Articles of interest

- Turner DC, Sahakian BJ. The cognition-enhanced classroom. In: Better Humans, published by DEMOS, 2006
- Turner DC, Sahakian BJ. Neuroethics of cognitive enhancement. BioSocieties, 2006
- Turner DC, Sahakian BJ. Ethical questions in functional neuroimaging and cognitive enhancement. Poiesis & Praxis, 2006
- Turner DC, Sahakian BJ. Analysis of the cognitive enhancing effects of modafinil in schizophrenia. Progress in Neurotherapeutics and Neuropsychopharmacology, 2006
- Turner DC. A review of the use of modafinil for attention deficit hyperactivity disorder (ADHD). Expert Review of Neurotherapeutics, 2006
- Duka T, Sahakian BJ, Turner DC. Experimental psychology and research into brain science, addiction and drugs. Foresight Review, 2005

Robin Felton, The Alzheimer's Society

Making a difference in Dementia Care

What is dementia

- The term 'dementia' is used to describe a collection of symptoms, including a decline in memory, reasoning and communication skills.
- These symptoms are caused by structural and chemical changes in the brain as a result of physical diseases such as Alzheimer's disease

- Dementia can affect people of any age
- Most common in older people
- 1 in 5 people over 80, and 1 in 20 over 65 has a form of dementia
- It is thought that many factors, including age, genetic background, medical history and lifestyle, can lead to onset of dementia
- Dementia is progressive

Types of dementia

Most common forms are

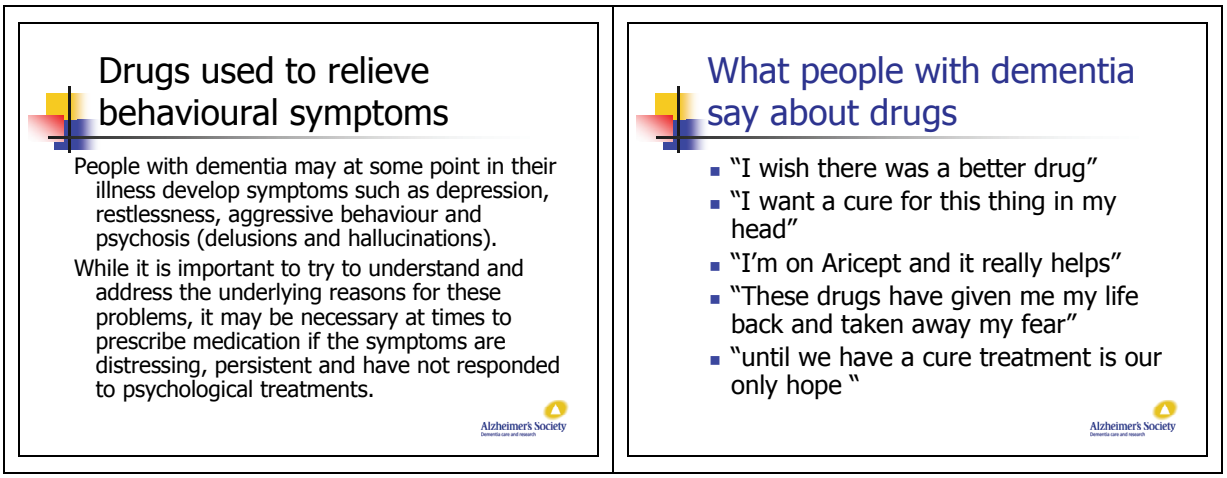
- Alzheimer's disease
- Vascular dementia
- Fronto-temporal dementia
- Dementia with Lewy bodies

Some facts

- 700,000 people with dementia in UK
- 1 person in every 88 (1.1%) of population
- Forecast to be 940,110 by 2021 and 1,735,087 by 2051
- This is an increase of 38% over the next 15 years and 154% over next 45 years
- Dementia is one of main causes of disability in later life
- Total financial cost of dementia is £17.03 billion

Drugs and dementia

- 4 licensed drugs for treatment of alzheimer's disease
- Acetylcholinesterase inhibitors
  - Aricept (Donepezil)
  - Exelon (Rivastigmine)
  - Reminyl (Galantamine)
- Ebixa (Memantine)


Drugs used to relieve behavioural symptoms
People with dementia may at some point in their illness develop symptoms such as depression, restlessness, aggressive behaviour and psychosis (delusions and hallucinations).
While it is important to try to understand and address the underlying reasons for these problems, it may be necessary at times to prescribe medication if the symptoms are distressing, persistent and have not responded to psychological treatments.
Alzheimer's Society
What people with dementia say about drugs
"I wish there was a better drug"
"I want a cure for this thing in my head"
"I'm on Aricept and it really helps"
"These drugs have given me my life back and taken away my fear"
"until we have a cure treatment is our only hope "
Alzheimer's Society

Keri Tozer and Sue Garratt, The Relay Project, Liverpool

Drugs and the future by ex-users

The Relay Project and Community Voice Service User Group

Achievements

✓ **First Service Users to attend Association of Chief Police Officers Annual Drugs Conference 2005/2006**

✓ **Representation at The Annual Royal College of General Practitioners Drugs Conference 2005/2006/2007**

✓ **Representation at The National Drug Treatment Conference 2005/2006/2007.**

✓ **Representation at The International Conference on Harm Reduction in Belfast 2005.**

✓**Representation at Annual Carers Conference 2007**

Heroin

Controlling the importation of illegal drugs into the UK

Trafficking in heroin and cocaine, particularly crack cocaine, poses the greatest single threat to the UK in terms of the scale of serious organised criminal involvement, the illegal proceeds secured and the overall harm caused. Home Office estimates put the harm caused by Class A drugs at around £13bn a year. This largely arises from the profits from sales, the crimes addicts commit to fund their habit, and the damage caused to family life and communities, as well as from costs to addicts' health. SOC

Prescribing pharmaceutical grade heroin to users will:
✓Reduce the need to commit crime to fund addiction
✓Reduce the cost of policing the importation of illegal drugs
✓Reduce the harm associated with poor quality heroin, high levels of cutting agents, talcum powder, rat poison, brick dust.
✓Reduce the cost to health services.

Using Galleries

Provides a safe, clean and staffed environment for people to use drugs.

- ✓ Opportunity to educate users on harm reduction and safer injecting methods.
- ✓ Quality of drugs can be tested
- ✓ Users can be educated and monitored regarding preparing the drugs, correct amount of citric, accessing sites etc.
- ✓ Monitor the physical health of users, checking sites and referring for treatment .
- ✓ Safe disposal of drug using equipment, needles, straws etc.
- ✓ Nalaxone and qualified staff available to reduce risk of overdose.
- ✓ Creates opportunities to engage users in harm reduction and treatment options.
- ✓ Reduces the spread of blood born viruses such as Hep C, HIV.

Cannabis

Cannabis

Re-classification of super cannabis: skunk to class A drug

More investment in studies of cannabis on mental health especially on:

Young people

Those with family history of schizophrenia

Those with family history of substance misuse

Those with family history of depression

Effects on short-term memory loss

Cocaine

Education to counter the current trends in glamourising the use of cocaine.

Dangers of the use of this drug long term effects:

Aggression, depression, addiction, neglect of health

Financial implications of cocaine use, one of most expensive drugs and particularly popular with young people who can least afford it.

More investment in producing a naltraxone type blocker.

Better treatment options than are currently available.

Education around dangers of contracting blood born virus's from sharing snorting equipment.

Alcohol

The most socially acceptable drug of all time.

Education on harm caused to both physical and mental health of long term use and binge drinking.

More restrictions on the sale of alcohol not just in terms of opening hours and age but also training licensed managers and staff on the responsible sale of alcohol.

Raising the age limit from 18 to 21 years

Producing a better and tighter system of identification

Working with children and families of alcohol users to prevent learned behaviour.

Education

Education is a key factor to successful harm reduction, you can never stop people taking drugs but you can give them the information they need to do it safely.

- ✓ Drugs education in schools, provided by ex-users and drugs workers rather than police officers as with the current system.
- ✓ Drugs education from 7 years and above.
- ✓ Drug liason workers based in schools with high levels of risk
- ✓ Children's Counsellors in schools to provide:
- ✓ Support in coping with difficult situations both in terms of
- ✓ Family, relationships, peer pressure, abuse, bullying and personal issues.
- ✓ More work around prevention and harm reduction, a more open and honest approach than "DON'T DO THAT".

Legal Enforcement

- DIP Programme has reduced crime by 20% nationally.
- For every £1 invested in treating drug users the criminal justice system save £9.50.
- However, the long term crime reduction figures for involuntary treatment are not clear.
- Treatment in prisons need to improve and after care services from prison need massive investment.
- Police, Courts and Agencies need to work together to ensure that people are given the right levels of support.
- Better training for police officers in recognising addiction and referring people for treatment.
- BUT MOST OF ALL……

Children

We must start investing in children services.

As a society we must begin to value, support and encourage children now as often they will become the users of the future.

People mainly turn to drug use to cope with traumatic situations often from childhood.

- ✓ Supporting families affected by substance misuse issues:
- ✓ Removing stigma and guilt around parental drug use.
- ✓ Better confidential support services for children.
- ✓ More work to support families to stay together.
- ✓ Better training for social workers on supporting families affected by substance misuse issues.

Information sheet - Some useful contacts

Mind in Birmingham
17 Graham Street
Hockley
Birmingham
West Midlands B1 3JR

0121 608 8001 or email admin@mind-birmingham.co.uk
www.mindinbirmingham.org

Mental Health Foundation
Mental Health Foundation
London Office
9th Floor
Sea Containers House
20 Upper Ground
London SE1 9QB,
http://www.mentalhealth.org.uk/

Rethink
West Midlands Regional Manager
Lesley Scott
Rethink
9 St Michael's Court
Victoria Street
West Bromwich
B70 8ET

Telephone: 0845 456 0455 or email:info@rethink.org
http://www.rethink.org/

Birmingham Drug Action Team
User Servces group: Lee Walker, Carer & User Involvement Officer on 0121 675 1810
Carers involvement: Lee Walker, Carer & User Involvement Officer on 0121 675 1810
http://www.birmingham-dat.org.uk/treatment/groups-for-service-users-carers

Birmingham Index of Voluntary Organisations
Sarah Greening, sarah.greening@wmdeanery.org
Health Information Co-ordinator,
Library Services Development Unit,
West Midlands Deanery
Birmingham Research Park
97 Vincent Drive
Birmingham
B15 2SQ

Telephone: 0121 414 7754
http://www.bivo.nhs.uk/

Patient and Public Involvement Forum, Birmingham and Solihull Mental Health
Care of:
Black Country Housing & Community Services Group Ltd
1 Causeway
Rowley Regis
B65 8AA

Tel: 0121 561 3845 or email chaffera@bcha.co.uk

Drugscope
40 Bermondsey Street,
London,
SE1 3UD
Phone: 020 7940 7500
Fax: 020 7940 7521
www.drugscope.org.uk/

Addaction
67-69 Cowcross Street
London
EC1M 6PU
Tel: 020 7251 5860

mailto:info@addaction.org.uk
www.addaction.org.uk/

Saneline: 0845 767 8000
The Samaritans: 08457 90 90 90 or 0121 666 6644

Appendix 10. Evaluation

Evaluation form – outreach discussion groups

Before you leave, we would appreciate it if you could answer a few questions about the event you have taken part in. This information will help us to understand how successful the project has been. It will also help us to improve any future projects we might run.

Please mark the relevant box below for each statement

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
The facilitator explained the purpose of the discussion clearly						
There was enough time for me to say everything I wanted to						
It is clear to me how the results of this process will be collected and used						
I believe that the people who commissioned this event will take notice of the results						
I enjoyed taking part						
I learnt something I did not know before						
Attending this event has helped me think more clearly about these issues						
Attending this event has reinforced the views I already had						
Attending this event made no difference to my views						
I changed my views as a result of attending this event						

How do you feel about the event overall?

1. What was the best part of the event you attended?

2. What was the worst thing about the event?

3. What would improve events like this?

4. What was the most important aspect, for you, of taking part in this event?

Your views on being involved

5. • Have you ever been involved in this type of consultation before?

A lot	
Quite a few times	
Not much	
Never	
Don't know	

6. How important do think it is to involve the public in discussing these sorts of issues?

Very important	
Fairly important	
Not very important	

Not at all important	
Don't know	

7. Do you think there should be more events for the public to discuss these sorts of issues?

Yes	
No	
Don't know	

8. Has being involved in this process made it more likely that you will want to get involved in these sorts of events in future?

Much more likely	
A bit more likely	
No difference	
Less likely	
A lot less likely	

Your views on drugs

9. How do you think we should deal with illegal drug use in this country?
(Please tick next to the answer that best reflects your views.)

As a crime problem	
As a health problem	
As both a health problem and a crime problem	
In other ways (please say how in the box below)	

10. Which of the following do you think is the most effective way of preventing young people from getting involved in drug use?

Education & information	
Prevention measures such as random drug testing in schools	
Harsher penalties for drug use	
Family support services	
Other ways (please say which ways in the box below)	

A bit of information about you

Would you mind answering a few questions about yourself, for equal opportunities monitoring. It will also help us to see if there are differences in the views of people, depending on their age, background or other factors. Your information will be treated confidentially and will not be seen by anyone outside the *drugsfutures* project team.

i) Are you: Female ☐ or Male ☐

ii) How would you describe your ethnic background?

a. White British ☐

b. White Other ☐

c. Asian or Asian British ☐

d. Black or Black British ☐

e. Mixed ☐

f. Other ☐_(please specify

iii) Which of the following age groups do you fit into?

a. 16 – 24 ☐

b. 25 – 39 ☐

c. 40 – 54 ☐

d. 55 – 65 ☐

e. Over 65 ☐

(*Just one more question overleaf….)*

Finally, would you like to stay in touch, and possibly be interviewed as part of the evaluation of this project? If so, please give us your contact details:

Title: First name: Surname:

_____ _____ _____

Email: Telephone: Post code:

_____ _____ _____

Thank you for taking the time to complete this questionnaire. Please hand it to one of the facilitators before you leave.

Evaluation form pre-event (workshops and Brainbox)

We would appreciate it if you could answer a few questions for us before we start. This will help us to learn from the event and to plan any future events, taking your comments into account.

Some general questions

1. Why have you decided to get involved in this process?

2. •What do you want this process to achieve?

3. What do you hope to get out of this process personally?

What do you think of the information so far?

4. How satisfied are you with the briefing materials you have received so far?
(Please put a tick in the box that reflects your views most closely.)

Very satisfied

Fairly satisfied

Not very satisfied

Not at all satisfied

Don't know

5. How clear are you about the purpose of this process at this point?

Very clear

Fairly clear

Not very clear

Not at all clear

Don't know

6. How clear are you about your role in this process, and what you will be expected to do?

Very clear

Fairly clear

Not very clear

Not at all clear

Don't know

7. Which of the following best describes how you feel about taking part in this event?

Interested

Nervous

Unsure about what I can offer to the discussion

Confident about my ability to add to the discussion

Other (please say how you feel)

Your views on drugs

8. How do you think we should deal with illegal drug use in this country?
(Please tick next to the answer that best reflects your views.)

As a crime problem

As a health problem

As both a health problem and a crime problem

In other ways (please say how in the box below)

9. Which of the following is it most important for drug research to focus on in the future?

Drugs for mental health problems such as depression or schizophrenia

Drugs that help to prevent addiction

Drugs for diseases of old age such as Alzheimer's Disease or dementia

There should be some other focus for drug research (please specify below)

10. Which of the following do you think is the most effective way of preventing young people from getting involved in drug use?

Education & information

Prevention measures such as random drug testing in schools

Harsher penalties for drug use

Family support services

Other ways (please say which ways in the box below)

11. If we invented a drug that makes you smarter and is relatively safe, would you take it?

Yes

No

Not sure

A bit of information about you

Would you mind answering a few questions about yourself? This is for equal opportunities monitoring. It will also help us to see if there are differences in the views of people, depending on their age, background or other factors. This information will be treated confidentially and will not be seen by anyone outside the *drugsfutures* project team

iv) Are you: Female ☐ or Male ☐

v) How would you describe your ethnic background?

a. White British ☐

b. White Other ☐

c. Asian or Asian British ☐

d. Black or Black British ☐

e. Mixed ☐

f. Other ☐ (please specify): _____

vi) Which of the following age groups do you fit into?

a. 16 – 24 ☐

b. 25 – 39 ☐

c. 40 – 54 ☐

d. 55 – 65 ☐

e. Over 65 ☐

Evaluation form post-event (workshop and Brainbox)

drugsfutures

Before you leave, we would appreciate it if you could answer a few questions about the event you have taken part in. This information will help us to understand how successful the project has been. It will also help us to improve any future projects we might run.

Please mark the relevant box below for each statement

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
The information provided was fair and balanced						
I would have liked more information in advance						
The experts were helpful and clear						
I have been able to discuss the issues that concern me						
There was enough time for me to say everything I wanted to						
It is clear to me how the results of this process will be collected and used						
The results of the debate genuinely reflected the discussions we had						
I believe that the people who commissioned this event will take notice of the results						
The event was well organised and well structured						
I enjoyed taking part						
I learnt something I did not know before						

Attending this event has helped me think more clearly about these issues						
Attending this event has reinforced the views I already had						
Attending this event made no difference to my views						
I changed my views as a result of attending this event						

How do you feel about the event overall?

8. Did the event meet your expectations / deliver what you hoped?

   Completely

   Mostly

   Partly

   Not really

   Not at all

9. How satisfied were you with the briefing materials / information you received?

   Very satisfied

   Fairly satisfied

   Not very satisfied

   Not at all satisfied

   Don't know

10. How satisfied were you with the structure and organisation of the event?

    Very satisfied

    Fairly satisfied

    Not very satisfied

    Not at all satisfied

    Don't know

11. What was the best part of the event you attended?

12. What was the worst thing about the event?

13. What would improve events like this?

14. What was the most important aspect, for you, of taking part in this event?

Your views on being involved

15. • Have you ever been involved in this type of consultation before?

A lot

Quite a few times

Not much

Never

Don't know

16. How important do think it is to involve the public in discussing these sorts of issues?

Very important

Fairly important

Not very important

Not at all important

Don't know

17. Do you think there should be more events for the public to discuss these sorts of issues?

Yes

No

Don't know

18. Has being involved in this process made it more likely that you will want to get involved in these sorts of events in future?

Much more likely

A bit more likely

No difference

Less likely

A lot less likely

What do you think of the resources provided?

19. Which resources were most useful to you?

Briefing notes on the topic

The scenario(s)

Information from experts

Information on the website

Other (please say what in the box below)

20. Can you give an example of a specific piece of information that you remember as particularly useful or interesting?

21. Who do you trust most to provide you with information on these topics

Friends

Health professionals (eg, doctors or nurses)

Media (TV or newspapers)

Academics

Family

I don't trust anyone to give me information on these topics

Other (please say what in the box below)

Your views on drugs

22. How do you think we should deal with illegal drug use in this country?

(Please tick next to the answer that best reflects your views.)

As a crime problem

As a health problem

As both a health problem and a crime problem

In other ways (please say how in the box below)

23. Which of the following is it most important for drug research to focus on in the future?

Drugs for mental health problems such as depression or schizophrenia

Drugs that help to prevent addiction

Drugs for diseases of old age such as Alzheimer's Disease or dementia

There should be some other focus for drug research (please specify below)

24. Which of the following do you think is the most effective way of preventing young people from getting involved in drug use?

Education & information

Prevention measures such as random drug testing in schools

Harsher penalties for drug use

Family support services

Other ways (please say which ways in the box below)

25. If we invented a drug that makes you smarter and is relatively safe, would you take it?

Yes

No

Not sure

A bit of information about you

Would you mind answering a few questions about yourself, for equal opportunities monitoring. It will also help us to see if there are differences in the views of people, depending on their age, background or other factors. Your information will be treated confidentially and will not be seen by anyone outside the *drugsfutures* project team.

vii) Are you: Female ☐ or Male ☐

viii) How would you describe your ethnic background?

a. White British ☐

b. White Other ☐

c. Asian or Asian British ☐

d. Black or Black British ☐

e. Mixed ☐

f. Other ☐ (please specify): _____

ix) Which of the following age groups do you fit into?

a. 16 – 24 ☐

b. 25 – 39 ☐

c. 40 – 54 ☐

d. 55 – 65 ☐

e. Over 65 ☐

(*Just one more question overleaf….)*

Finally, would you like to stay in touch, and possibly be interviewed as part of the evaluation of this project? If so, please give us your contact details:

Title:	First name:	Surname:
_____	_____	_____

Email:	Telephone:	Post code:
_____	_____	_____

Thank you for taking the time to complete this questionnaire. Please hand it to one of the facilitators before you leave.

Appendix 11. Additional materials

Chronology and results of electronic voting questions

Launch event

Which do you think is the most effective way of preventing young people from using drugs?

1. education and information – 58%
2. stricter drug laws – 12%
3. family support services – 26%

Which of the following areas of drug research do you think is most important?

1. research into drugs for mental health problems 53%
2. research into drugs that help to prevent addiction 31%
3. research into drugs to improve the performance of the 'healthy' brain 12%

Which do you consider to be the most harmful:

1. alcohol 53%
2. cannabis 36%
3. ecstasy 36%
4. heroin – N/A – didn't show up

If we developed a drug in the future that made you smarter, would you take it?

1. yes 47%
2. no 52%

Exeter Workshop – AM (n=32)

On which of the following areas do you think it is most important for scientific research to focus on in the future? [Q4Newdrugs.ppv]

1. Developing new treatments for depression 19%
2. Developing new treatments for Alzheimer's Disease 6%
3. Developing new treatments to prevent addiction to drugs 29%
4. Developing new treatments for people already addicted to drugs 10%
5. Other 35%

Which of the following would most benefit the way we approach mental health in the future? [MentalHealth.ppv]

1. Removing the stigma attached to mental health problems 28%
2. Developing new drug treatments for mental health problems 25%
3. Developing other new treatments for mental health problems (e.g. counselling, other treatments, support etc.) 44%
4. Other 3%

Here are six factors which might make a young person more vulnerable to illegal drug use. Please rank these in order of importance [Q5Factors.ppv]

1. Having suffered from child abuse 17%
2. Having parents who use drugs 21%
3. Genetic make-up 12%
4. Mental Health problems 15%
5. People using drugs in the neighbourhood 13%
6. Peer pressure 22%

If we could develop a drug which prevents addiction given these options do you think we should make it…? [Q6Vaccine.ppv]

1. compulsory for everyone 0%
2. Compulsory for those deemed to be at risk of addiction 16%
3. Available only on prescription 38%
4. Available over the counter for adults to choose to buy for own use 22%
5. Available over the counter for adults to give to their children 0%
6. Illegal to make or use 9%
7. Not sure 16%

Which of the following would be of most benefit to the way we approach drug addiction in the future? [[Q8.ppv]

1. Vaccinating all babies to prevent addiction 10%
2. Targeting social resources at young people whose family background or environment makes them more likely to use or become addicted to drugs 23%
3. Targeting social resources at all young people regardless of their family or environment 37%
4. Other 30%

Which of the following statements do you agree with..? [Drugs.ppv]

1. Adults should legally be allowed to take any drugs they want 17%
2. Adults should legally be allowed to take some of the drugs that are currently illegal 47%
3. All use of drugs for non-medical reasons should be illegal 37%

Exeter Workshop – PM (n=32)

On which of the following areas do you think it is most important for scientific research to focus on in the future? [Q4Newdrugs.ppv]

1. Developing new treatments for depression 25% (+6%)
2. Developing new treatments for Alzheimer's Disease 3% (-3%)
3. Developing new treatments to prevent addiction to drugs 19% (-10%)
4. Developing new treatments for people already addicted to drugs 28% (+18%)
5. Other 25% (-10%)

Which of the following would most benefit the way we approach mental health in the future? [MentalHealth.ppv]

1. Removing the stigma attached to mental health problems 16% (-12%)
2. Developing new drug treatments for mental health problems 16% (-9%)
3. Developing other new treatments for mental health problems (e.g. counselling, other treatments, support etc.) 69% (+15%)
4. Other 0%(-3%)

Here are six factors which might make a young person more vulnerable to illegal drug use. Please rank these in order of importance [Q5Factors.ppv]

1. Having suffered from child abuse 14% (-3%)
2. Having parents who use drugs 19% (-2%)
3. Genetic make-up 14% (+2%)
4. Mental Health problems 16% (+1%)
5. People using drugs in the neighbourhood 15% (+2%)
6. Peer pressure 22% (no change)

If we could develop a drug which prevents addiction given these options do you think we should make it…? [Q6Vaccine.ppv]

1. compulsory for everyone 3% (+3%)
2. Compulsory for those deemed to be at risk of addiction 9% (-7%)
3. Available only on prescription 34% (-4%)
4. Available over the counter for adults to choose to buy for own use 22% (no change)
5. Available over the counter for adults to give to their children 0% (no change)
6. Illegal to make or use 19% (+10%)
7. Not sure 13% (-3%)

Which of the following would be of most benefit to the way we approach drug addiction in the future? [Q8.ppv]

1. Vaccinating all babies to prevent addiction 0% (-10%)
2. Targeting social resources at young people whose family background or environment makes them more likely to use or become addicted to drugs 16% (-7%)
3. Targeting social resources at all young people regardless of their family or environment 48% (+11%)
4. Other 35% (+5%)

Which of the following statements do you agree with..? [Drugs.ppv]

1. Adults should legally be allowed to take any drugs they want 24% (+7%)
2. Adults should legally be allowed to take some of the drugs that are currently illegal 36% (-11%)
3. All use of drugs for non-medical reasons should be illegal 39% (+2%)

Exeter Demographics (n=32)

Gender [Q9Demograph.ppv]

1. Male 55%
2. Female 45%

Age [DemographAge.ppv]

1. Under 18 years 13%
2. 18 – 25 years 26%
3. 26 – 40 years 26%
4. 41 – 60 years 26%
5. Over 60 years 10%

Ethnic group [Q10Demograph.ppv]

1. White British 88%
2. White other 0%

3. Asian British 0%
4. Asian other 0%
5. Black British 3%
6. Black other 0%
7. Chinese 0%
8. Mixed 3%
9. Other ethnic group 6%

Employment status [Q11demograph.ppv]

1. in full time education 30%
2. Working full time 12%
3. Working part-time 30%
4. Looking after the home or family 9%
5. Retired 0%
6. Unemployed and seeking work 3%
7. On a government work or training scheme 0%
8. Permanently sick or disabled 15%
9. Temporarily unable to work because of short term illness or injury 0%

Housing tenure [Q12demograph.ppv]

1. Your own property 35%
2. Privately rented housing 19%
3. Rented housing – social sector 13%
4. Other 32%

Liverpool workshop – AM (n=39)

Do you think the use of illegal drugs in this country is increasing or decreasing? [Q1FutureDrugUse.ppv]

1. Increasing 92%
2. Decreasing 3%
3. Staying the same 5%
4. Not sure 0%

What do you think is the best course of action for someone who uses illegal drugs? [Q2Reaction.ppv]

1. Send them to prison 3%
2. Give them medical treatment for their addiction 33%
3. Give them other forms of support (e.g. counselling, advice, education) 62%
4. Not sure 3%

Which of the following drugs do you think causes the most harm to an individual? [Q3HarmIndividual.ppv]

1. Heroin 36%
2. Nicotine 10%
3. Ecstasy 5%
4. Cannabis 5%
5. Alcohol 44%

Which of the following drugs do you think causes the most harm to wider society? [Q4HarmSociety]

1. Heroin 41%
2. Nicotine 8%
3. Ecstasy 3%
4. Cannabis 8%
5. Alcohol 41%

If a recreational drug was invented that caused only minimal harm to an individual or to society would you take it?

1. Yes 29%
2. No 71%

If we could develop a drug which prevents addiction given these options do you think we should make it?

1. Compulsory for everyone 3%
2. Compulsory for those deemed to be at risk of addiction 37%
3. Available only on prescription 42%
4. Available over the counter for adults to choose to buy for their own use 11%
5. Available over the counter for adults to buy to give to their children 3%
6. Illegal to make or use 0%
7. Not sure 7%

Liverpool workshop – PM (n=39)

Do you think the use of illegal drugs in this country is increasing or decreasing? [Q1FutureDrugUse.ppv]

1. Increasing 86% (-6%)
2. Decreasing 11% (+8%)
3. Staying the same 3% (-2%)
4. Not sure 0% (no change)

What do you think is the best course of action for someone who uses illegal drugs? [Q2Reaction.ppv]

1. Send them to prison 3% (no change)
2. Give them medical treatment for their addiction 20% (-13%)
3. Give them other forms of support (e.g. counselling, advice, education) 77% (+15%)
4. Not sure 0% (-3%)

Which of the following drugs do you think causes the most harm to an individual? [Q3HarmIndividual.ppv]

1. Heroin 42% (+6%)
2. Nicotine 11% (+1%)
3. Ecstasy 6% (+1%)
4. Cannabis 6% (+1%)
5. Alcohol 36% (-8%)

Which of the following drugs do you think causes the most harm to wider society? [Q4HarmSociety]

1. Heroin 47% (+6%)
2. Nicotine 8% (no change)
3. Ecstasy 0% (-3%)

4. Cannabis 3% (-5%)
5. Alcohol 42% (+1%)

If a recreational drug was invented that caused only minimal harm to an individual or to society would you take it?

1. Yes 17% (-12%)
2. No 83% (+12%)

If we could develop a drug which prevents addiction given these options do you think we should make it?

1. Compulsory for everyone 9% (+6%)
2. Compulsory for those deemed to be at risk of addiction 37% (no change)
3. Available only on prescription 37% (-5%)
4. Available over the counter for adults to choose to buy for their own use 9% (-2%)
5. Available over the counter for adults to buy to give to their children 0% (-3%)
6. Illegal to make or use 0% (no change)
7. Not sure 9% (+4%)

Liverpool Demographics (n=39)

Gender [DemogSex.ppv]

1. Male 44%
2. Female 56%

Age [demogAge.ppv]

1. Under 18 years 0%
2. 18 – 25 years 14%
3. 26 – 40 years 41%
4. 41 – 60 years 38%
5. Over 60 years 8%

Ethnic group [DemogEthnic.ppv]

1. White British 83%
2. White other 0%
3. Asian British 0%
4. Asian other 0%
5. Black British 8%
6. Black other 3%
7. Chinese 0%
8. Mixed 6%
9. Other ethnic group 0%

Employment status [DemogWork.ppv]

1. in full time education 8%
2. Working full time 32%
3. Working part-time 19%
4. Looking after the home or family 14%
5. Retired 8%
6. Unemployed and seeking work 8%
7. On a government work or training scheme 0%
8. Permanently sick or disabled 3%

9. Temporarily unable to work because of short term illness or injury 8%

Housing tenure [DemogHouse.ppv]
1. Your own property 44%
2. Privately rented housing 14%
3. Rented housing – social sector 33%
4. Other 8%

Glasgow Workshop – AM (n=26)

Which one of the following do you consume most frequently? [Q1 – substances.ppv]
1. Tea or coffee 75%
2. Red bull or similar 4%
3. Pro-Plus (caffeine pills) 0%
4. None of the above 21%

Which of the following do you think is the most effective way to maintain a healthy brain? [Q2 – Healthybrain.ppv]
1. Memory tests 8%
2. Puzzles 46%
3. Take cod liver oil 8%
4. Take regular exercise 27%
5. None of the above 12%

If you could buy a pill over the counter that helped you to overcome the effects of normal ageing on your memory, would you take it? (e.g. something that would help you remember where you had put your keys) [Q3 – Memorypill.ppv]
1. Yes 38%
2. No 29%
3. Don't know 33%

If a pill as safe as aspirin was developed that improved your ability to solve problems would you take it? [Q4 – improveability.ppv]
1. Yes 64%
2. No 24%
3. Don't know 12%

In the future in which of the following jobs would it be most acceptable to take drugs (as safe as aspirin) to improve concentration? [Q5 – problemsolving.ppv]
1. Train driver 8%
2. Surgeon 20%
3. Politician 0%
4. Teacher 4%
5. Policeman 0%
6. Nuclear power station operator 8%
7. Soldier 16%
8. All of the above 28%
9. None of the above 16%

When developing pills to improve problem solving skills, which of the following groups should scientists prioritise? [Q5 – ADHD.ppv]

1. Children and young people with ADHD 76%
2. Older people with Alzheimer's disease / dementia 24%

Do you think it is acceptable for healthy young people to take drugs (as safe as an aspirin) to improve problem solving skills and concentration? [Q7 – AcceptCYP.ppv]

1. Yes 15%
2. No 65%
3. Don't know 19%

Do you think it is acceptable for healthy adults to take drugs (as safe as an aspirin) to improve problem solving skills and concentration? [Q8 - Acceptadults.ppv]

1. Yes 28%
2. No 60%
3. Don't know 12%

Do you think it is acceptable for older people with Alzheimer's disease / dementia to take drugs to improve problem solving skills and concentration? [Q9 – Acceptalzheimer's.ppv]

1. Yes 70%
2. No 17%
3. Don't know 13%

Do you think it is acceptable for young people with ADHD to take drugs to improve problem solving skills and concentration? [Q10 – AcceptADHD]

1. Yes 58%
2. No 13%
3. Don't know 29%

Glasgow Workshop – PM (n=26)

Which one of the following do you consume most frequently? [Q1 – substances.ppv]

1. Tea or coffee 73% (-2%)
2. Red bull or similar 4% (no change)
3. Pro-Plus (caffeine pills) 0% (no change)
4. None of the above 23% (+2%)

Which of the following do you think is the most effective way to maintain a healthy brain? [Q2 – Healthybrain.ppv]

1. Memory tests 19% (+11%)
2. Puzzles 38% (-8%)
3. Take cod liver oil 4% (-4%)
4. Take regular exercise 35% (+8%)
5. None of the above 4%(-8%)

If you could buy a pill over the counter that helped you to overcome the effects of normal ageing on your memory, would you take it? (e.g. something that would help you remember where you had put your keys) [Q3 – Memorypill.ppv]

1. Yes 42% (+4%)
2. No 38% (+9%)

3. Don't know 19%(-14%)

If a pill as safe as aspirin was developed that improved your ability to solve problems would you take it? [Q4 – improveability.ppv]

1. Yes 67% (+3%)
2. No 33% (+9%)
3. Don't know 0% (-12%)

In the future in which of the following jobs would it be most acceptable to take drugs (as safe as aspirin) to improve concentration? [Q5 – problemsolving.ppv]

1. Train driver 0% (-8%)
2. Surgeon 4% (-16%)
3. Politician 4% (+4%)
4. Teacher 0% (-4%)
5. Policeman 0% (no change)
6. Nuclear power station operator 4% (-4%)
7. Soldier 12% (-4%)
8. All of the above 20% (-8%)
9. None of the above 56% (+40%)

When developing pills to improve problem solving skills, which of the following groups should scientists prioritise? [Q5 – ADHD.ppv]

1. Children and young people with ADHD 65% (-11%)
2. Older people with Alzheimer's disease / dementia 35% (+11%)

Do you think it is acceptable for healthy young people to take drugs (as safe as an aspirin) to improve problem solving skills and concentration? [Q7 – AcceptCYP.ppv]

1. Yes 20% (+5%)
2. No 76% (+11%)
3. Don't know 4% (-15%)

Do you think it is acceptable for healthy adults to take drugs (as safe as an aspirin) to improve problem solving skills and concentration? [Q8 - Acceptadults.ppv]

1. Yes 24% (-4%)
2. No 72% (+12%)
3. Don't know 4% (-8%)

Do you think it is acceptable for older people with Alzheimer's disease / dementia to take drugs to improve problem solving skills and concentration? [Q9 – Acceptalzheimer's.ppv]

1. Yes 68% (-2%)
2. No 20% (+3%)
3. Don't know 12% (-1%)

Do you think it is acceptable for young people with ADHD to take drugs to improve problem solving skills and concentration? [Q10 – AcceptADHD]

1. Yes 72% (+14%)
2. No 8% (-5%)
3. Don't know 20% (-9%)

Glasgow Demographics (n=26)

Gender [DemogGender.ppv]

1. Male 42%
2. Female 58%

Age [DemogAge.ppv]

1. Under 18 years 4%
2. 18 – 25 years 35%
3. 26 – 40 years 27%
4. 41 – 60 years 31%
5. Over 60 years 4%

Ethnic group [DemogEthnic.ppv]

1. White British 80%
2. White other 4%
3. Asian British 4%
4. Asian other 4%
5. Black British 0%
6. Black other 4%
7. Chinese 0%
8. Mixed 4%
9. Other ethnic group 0%

Employment status [DemogEmploy.ppv]

1. in full time education 46%
2. Working full time 33%
3. Working part-time 0%
4. Looking after the home or family 17%
5. Retired 4%
6. Unemployed and seeking work 0%
7. On a government work or training scheme 0%
8. Permanently sick or disabled 0%
9. Temporarily unable to work because of short term illness or injury 0%

Housing tenure [DemogHousing.ppv]

1. Your own property 32%
2. Privately rented housing 8%
3. Rented housing – social sector 44%
4. Other 16%

Belfast – AM (n = 40)

Which of these drugs do you think is most harmful to young people as individuals? [HarmYP.ppv]

1. Alcohol 33%
2. Cannabis 5%
3. Nicotine 10%
4. Heroin 28%
5. Solvents 18%
6. Ecstasy 5%

Which of these drugs do you think is most harmful to wider society? [HarmSociety.ppv]

1. Alcohol 53%
2. Cannabis 8%
3. Nicotine 15%
4. Heroin 23%
5. Solvents 0%
6. Ecstasy 3%

Here are six factors which might make a young person more vulnerable to illegal drug use. Please rank these in order of importance [Ranking.ppv]

1. Having suffered from child abuse 13%
2. Having parents who use drugs 24%
3. Genetic make-up 10%
4. Mental Health problems 13%
5. Peer pressure 22
6. People using drugs in the neighbourhood 17

Which of the following would be of most benefit to the way we approach drug addiction in the future? [Future.ppv]

1. Targeting social resources at young people whose family background or environment makes them more likely to use or become addicted to drugs 20%
2. Vaccinating all babies to prevent addiction 15
3. Targeting social resources at all young people regardless of their family or environment 65%

Which of the following do you think would cause most harm to a young person? [HarmMHVsDrugs.ppv]

1. Having mental health problems 17%
2. Having drug abuse problems 68%
3. Not sure 15%

Which of the following approaches do you think is most effective in treating young people with mental health problems? [Treatment.ppv]

1. Use the appropriate medication 0%
2. Provide individual family support 20%
3. Both medication and support 80%
4. Not sure 0%

Belfast – PM (n=33)

Which of these drugs do you think is most harmful to young people as individuals? [HarmYP.ppv]

1. Alcohol 52% (+19%)
2. Cannabis 3% (-2%)
3. Nicotine 3% (-7%)
4. Heroin 27% (-1%)
5. Solvents 15% (-3%)
6. Ecstasy 0% (-5%)

Which of these drugs do you think is most harmful to wider society? [HarmSociety.ppv]

1. Alcohol 76% (+23%)
2. Cannabis 0% (-8%)
3. Nicotine 3% (-12%)
4. Heroin 21% (-2%)
5. Solvents 0% (no change)
6. Ecstasy 0% (no change)

Here are six factors which might make a young person more vulnerable to illegal drug use. Please rank these in order of importance [Ranking.ppv]

1. Having suffered from child abuse 14% (+1%)
2. Having parents who use drugs 23% (-1%)
3. Genetic make-up 10% (no change)
4. Mental Health problems 14% (-1%)
5. Peer pressure 23% (+1%)
6. People using drugs in the neighbourhood 16% (-1%) –

Which of the following would be of most benefit to the way we approach drug addiction in the future? [Future.ppv]

1. Targeting social resources at young people whose family background or environment makes them more likely to use or become addicted to drugs 6% (-14%)
2. Vaccinating all babies to prevent addiction 3% (-12%)
3. Targeting social resources at all young people regardless of their family or environment 91% (+26%)

Which of the following do you think would cause most harm to a young person? [HarmMHVsDrugs.ppv]

1. Having mental health problems 25% (+8%)
2. Having drug abuse problems 56% (-12%)
3. Not sure 19% (+4%)

Which of the following approaches do you think is most effective in treating young people with mental health problems? [Treatment.ppv]

1. Use the appropriate medication 3% (+3%)
2. Provide individual family support 19% (-1%)
3. Both medication and support 74% (-6%)
4. Not sure 3% (+3%)

Belfast Demographics (n=33)

Gender [Gender.ppv]

1. Male 50%
2. Female 50%

Age [DemogAge.ppv]

1. Under 18 years 10%
2. 18 – 25 years 29%
3. 26 – 40 years 32%
4. 41 – 60 years 23%
5. Over 60 years 6%

Ethnic group [Ethnicity.ppv]
1. White British 80%
2. White other 13%
3. Asian British 0%
4. Asian other 3%
5. Black British 0%
6. Black other 0%
7. Chinese 3%
8. Mixed 0%
9. Other ethnic group 0%

Employment status [Job.ppv]
1. in full time education 6%
2. Working full time 66%
3. Working part-time 16%
4. Looking after the home or family 3%
5. Retired 6%
6. Unemployed and seeking work 0%
7. On a government work or training scheme 3%
8. Permanently sick or disabled 0%
9. Temporarily unable to work because of short term illness or injury 0%

Housing tenure [Housing.ppv]
1. Your own property 66%
2. Privately rented housing 16%
3. Rented housing – social sector 13%
4. Other 6%

Merthyr Tydfil – AM (n=38)

Which one of the following areas do you think it is most important for scientific research to focus on in the future? [ScienRes.ppv]
1. Developing new treatments for depression 8%
2. Developing new treatments for Alzheimer's Disease 58%
3. Developing new treatments to prevent addiction to drugs 22%
4. Developing new treatments for people already addicted to drugs 3%
5. Other 8%

Which of the following would most benefit the way we approach mental health in the future? [Most benefit.ppv]
1. Reducing stigma 24%
2. Developing new drugs 21%
3. Developing new alternative therapies 55%

Which of the following do you think would cause more harm to a young person? [Harm.ppv]
1. Mental health problems 17%
2. Drug abuse problems 83%

Which of the following approaches do you think is most effective in treating young people with mental health problems? [EffectTreat.ppv]

1. Use the appropriate medications 3%
2. Provide individual family support 14%
3. Both medication and support 78%
4. Not sure 6%

Which one of the following statements do you most agree with? [regul.ppv]

1. Adults should legally be allowed to take any drugs they want 6%
2. Adults should legally be allowed to take some drugs that are currently illegal but some should remain restricted 71%
3. All use of drugs for non-medical reasons should be illegal (remember that alcohol is a drug) 23%

Which one of the following do you think is most likely to lead to someone having mental health problems? [LeadtoMH.ppv]

1. Stress 22%
2. Genetic make-up 14%
3. Personality type 6%
4. Alcohol / drug abuse 33%
5. A traumatic life event 25%

Merthyr Tydfil – PM (n=38)

Which one of the following areas do you think it is most important for scientific research to focus on in the future? [ScienRes.ppv]

1. Developing new treatments for depression 8% (no change)
2. Developing new treatments for Alzheimer's Disease 59% (+1%)
3. Developing new treatments to prevent addiction to drugs 22% (no change)
4. Developing new treatments for people already addicted to drugs 5% (+2%)
5. Other 5% (-3%)

Which of the following would most benefit the way we approach mental health in the future? [Most benefit.ppv]

1. Reducing stigma 14% (-10%)
2. Developing new drugs 14% (-7%)
3. Developing new alternative therapies 72% (+17%)

Which of the following do you think would cause more harm to a young person? [Harm.ppv]

1. Mental health problems 29% (+12%)
2. Drug abuse problems 71% (-12%)

Which of the following approaches do you think is most effective in treating young people with mental health problems? [EffectTreat.ppv]

1. Use the appropriate medications 3% (no change)
2. Provide individual family support 15% (+1%)
3. Both medication and support 79% (+1%)
4. Not sure 3% (-3%)

Which one of the following statements do you most agree with? [regul.ppv]

1. Adults should legally be allowed to take any drugs they want 3% (-3%)
2. Adults should legally be allowed to take some drugs that are currently illegal but some should remain restricted 72% (+1%)
3. All use of drugs for non-medical reasons should be illegal (remember that alcohol is a drug) 25% (+2%)

Which one of the following do you think is most likely to lead to someone having mental health problems? [LeadtoMH.ppv]

1. Stress 5% (-17%)
2. Genetic make-up 11% (-3%)
3. Personality type 11% (+5%)
4. Alcohol / drug abuse 46% (+13%)
5. A traumatic life event 27% (+2%)

Merthyr Tydfil – Demographics (n=38)

Gender [DemogSex.ppv]

1. Male 30%
2. Female 70%

Age [DemogAge.ppv]

1. Under 18 years 0%
2. 18 – 25 years 11%
3. 26 – 40 years 22%
4. 41 – 60 years 49%
5. Over 60 years 19%

Ethnic group [DemogEthnic.ppv]

1. White British 100%
2. White other 0%
3. Asian British 0%
4. Asian other 0%
5. Black British 0%
6. Black other 0%
7. Chinese 0%
8. Mixed 0%
9. Other ethnic group 0%

Employment status [DemogWork.ppv]

1. in full time education 3%
2. Working full time 47%
3. Working part-time 9%
4. Looking after the home or family 9%
5. Retired 24%
6. Unemployed and seeking work 3%
7. On a government work or training scheme 0%
8. Permanently sick or disabled 6%
9. Temporarily unable to work because of short term illness or injury 0%

Housing tenure [DemogHouse.ppv]

1. Your own property 62%

2. Privately rented housing 8%
3. Rented housing – social sector 19%
4. Other 11%

Brain Box Interactive Voting

Participants were asked to rate the level of importance of the six priorities they had identified. The following section presents priorities within each theme and the results from the interactive voting.

Mental Health

The top three priorities for mental health, from the trade off exercise, were as follows:

- Research into prevention of mental health conditions
- Services and support for family members
- Introduce education to widen awareness of mental health problems

In summary -

- 96% of participants stated ‘Services and support for family members’ was very important or important
- 95% of participants stated ‘Research into prevention of mental health conditions’ was very important or important
- In comparison, only 37% of participants stated that it was very important or important to ‘Develop a blood test for mental health problems’

	Priority	Very important	Important	Neither important nor unimportant	Not particularly important	Not at all important	Mean
1	Research into prevention of mental health conditions	77	18	5	0	0	4.73
2	Services and support for family members	73	23	5	0	0	4.68
3	Introduce education to widen awareness of mental health problems	68	27	0	5	0	4.59
4	Mental health conditions to be taken more seriously	71	14	5	5	5	4.43
5	Greater focus on counselling and other services	57	33	5	5	0	4.43
6	Develop a blood test for mental health problems	14	23	32	14	14	3.05

Recreational drugs

The top three priorities for recreational drugs, from the trade off exercise, were as follows:

- More focus on drug dealers
- Greater availability and access to treatment and support for users
- Make regulation reflect the harms of drugs
- Provision of shooting galleries

In summary -

- All participants stated it was very important or important for More focus on drug dealers
- All participants stated it was very important or important to Make regulation reflect the harms of drugs
- In comparison, only 59% of participants stated that it was very important or important to take a ‘Tougher stance against drug users’

	Priority	Very important (%)	Important (%)	Neither important nor unimportant (%)	Not particularly important (%)	Not at all important (%)	Mean
1	More focus on drug dealers	81	19	0	0	0	4.81
2	Make regulation reflect the harms of drugs	68	32	0	0	0	4.68
3	Greater availability and access to treatment and support for users	68	27	5	0	0	4.64
4	Provision of shooting galleries	38	52	5	5	0	4.24
5	Education provided by ex-users	55	27	5	5	9	4.14
6	Tougher stance against drug users	27	32	9	32	0	3.55

Cognition enhancers

In summary -

- All participants stated it was very important or important to 'Research into the long terms effects of use'
- 91% of participants stated it was very important or important to Research before policy is made for use for healthy people

	Priority	Very important (%)	Important (%)	Neither important nor unimportant (%)	Not particularly important (%)	Not at all important (%)	Mean
1	Research into the long terms effects of use	95	5	0	0	0	4.95
2	Research before policy is made for use for healthy people	91	0	5	5	0	4.8
3	Research should focus in the CE for older people	32	36	27	5	0	4.36
4	Research to focus on CE for children and young people	41	5	27	23	5	4.03
5	Research should focus on CE for certain jobs e.g. soldiers	41	32	9	5	14	3.94
6	Make policy because CE are currently in use for healthy people	50	14	9	14	14	3.75

Filming consent form

DRUGSFUTURES RELEASE FORM

Thank you for agreeing to participate in this project, undertaken by OPM.

- The objective of the video is to highlight the issues raised by *Drugsfutures* for public debate, and to explore the effectiveness of *Drugsfutures* in raising these issues.
- Selected video clips and quotes from discussions and interviews may be used by OPM to publicise the objectives outlined above.
- Out of the footage captured from this and other *Drugsfutures* events, the final ten minute edit, or excerpts from the final edit, may be used in presentations or on the internet for both public and private audiences.
- Your name will not be used unless you agree that it is of public interest with regard to this project, eg. as a science expert.

  If you agree to your name and image being used, please tick here: [ ]
  If you would prefer your name and/or image to be withheld, please tick here: [ ]
- You have the right to refuse to answer any questions asked and can terminate your participation at anytime.
- With the exception of published materials, all recorded materials will be securely stored by OPM and will be destroyed after five years. OPM complies with the Data Protection Act 1998, if you have any queries please call Diane Beddoes at OPM on 020 7239 7844.

If you understand and agree to these conditions for disclosure of information, please sign below. Thank you.

Participant	**On behalf of OPM**
Signature……	**Signature**……..
Printed……	**Printed** …….
Date……	**Date**……....

Appendix 12. Media Coverage

Summary

National Coverage

Broadcast
1 February 2007
BBC Radio 4 Today Programme: Interview with Prof Trevor Robbins
(available online at:
http://www.bbc.co.uk/radio4/today/listenagain/zthursday_20070201.shtml

16 April 2007
BBC Radio 4 – today programme
http://www.bbc.co.uk/radio4/today/listenagain/zmonday_20070416.shtml

16 April 2007
BBC Radio 4 – The Defeat of Sleep
http://www.bbc.co.uk/radio4/science/pip/expd1/

Print
Financial Times, April 17 2007
'Intelligence' drugs are put to the test
By Salamander Davoudi
http://search.ft.com/ftArticle?sortBy=gadatearticle&queryText=Salamander+Davoudi&y=8&aje=true&x=11&id=070417000681&page=3

Daily Mail, 18th April 2007
Fears over drugs that can boost your brain
by Jenny Hope
http://www.dailymail.co.uk/pages/live/articles/health/healthmain.html?in_article_id=449184&in_page_id=1774

Daily telegraph 18 April 2007
Intelligence drugs could be 'common as coffee'
By Nicole Martin
http://www.telegraph.co.uk/global/main.jhtml?xml=/global/2007/04/18/ndrugs18.xml

Online Media
BBC Online 16 April 2007
Drugs may boost your brain power
By Pallab Ghosh
http://news.bbc.co.uk/1/hi/health/6558871.stm#

Contractor UK – 19 April 2007
UK to sample 'smart drugs'

http://www.contractoruk.com/news/003205.html

Local Coverage

Broadcast

9 February 2007
BBC Radio West Midlands – interview with Robert Frost

16 February 2007
Wirral Buzz – interview with Prof Gabriel Horne

BBC Radio Mersey – Interview with Prof Jonathan Wolffe

Radio City – interview with local participant

Century Radio – Interview with Prof Roger Brownsword and local participant

23 February 2007
Westcountry Television – interview with workshop participant

24 February 2007
ITV South West – interview with participant

3 March 2007
BBC Radio Scotland – interview with Danielle Turner

Print
Liverpool Echo, Feb 17 2007
City hosts drug laws debate

Big Issue North, Feb 2007

Exeter Express and Echo, 24 February 2007
CITY HOSTING DRUGS DEBATE

International

Hindustan Times, 28 April 2008
Jury is out on wakefulness drug

Gulf News 21 April 2007
Think over this - you could use a memory pill

Wired News 16 April 2007

Smarts in a Bottle: UK Government Evaluates Cognition Enhancers

News-medical.net, 19 April 2007
Modafinil which improves intelligence under scrutiny by Health Department

ABC News Australia – the World Today, 17 April 2007
Smart drugs under examination

Commentary on media coverage

The volume and profile of the media coverage generated is impressive, with significant mentions in mainstream broadsheet newspapers, as well as two features on the Today Programme (generally considered to be the most influential media outlet).

While this will be extremely valuable in helping build the profile of the project and the Academy, it has been disappointing that the most significant coverage either did not mention the drugsfutures consultation website or took place after the end of the consultation. There are a number of possible reasons for this.

Firstly, the national media were not interested in dialogue and debate. The resounding feedback after the first round of 'selling in' was that they would be interested when we had some results. Coverage picked up considerably when we released some preliminary results. Online outlets such as the BBC were reluctant to provide links from relevant stories to the drugsfutures site.

Secondly, the national media was slow to pick up the story. The interest of nationals only picked up once the BBC trailed details of their programme. This is despite considerable time, effort and expertise being put into generating more timely coverage early on. In particular, the project team worked closely with the AMS team to hook onto a Lancet story that picked up on issues relating to drugsfutures – to no avail.

Finally, opportunities were missed to promote the website through spokespeople and interviewees. While it is difficult to avoid being edited in print media, there was at least one opportunity to mention the site during a live broadcast.

These comments do not apply to the work we did with local media however. While this work appeared to be time consuming for relatively small audiences, the coverage delivered our messages much more effectively, with the website being mentioned in every case, helping generate participants in the consultation.

Lessons Learned

- The national media isn't interested in dialogue before there are any results. Focus on the local media instead
- Local media want local spokespeople – experts or citizens
- The topics being discussed in dialogue activities are ideal for local talk radio stations, so have good speakers ready
- Use preliminary findings to interest the national media
- Get one national outlet and others will follow
- Get the BBC online and others around the world will follow.

Appendix 13. Online consultation

Summary Report of the Online Consultation

Prepared for the Academy of Medical Sciences
by Dialogue by Design

April 2007

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www.drugsfutures.org.uk

Background

The UK Government asked the Academy of Medical Sciences (AMS) to take forward a process of further deliberation around the issues raised in the Foresight report, 'Drugs Futures 2025?' .The report, published in July 2005, was based on 15 'state-of-science' reviews and explored the likely impact of future science on addiction, drug use and treatments for mental well-being.

An Academy Working Group was convened to consider, in consultation with experts and the public, the societal, health, safety and environmental issues raised by the advances described in the report. Issues around three types of substance will be explored: illegal and legal 'recreational' drugs; medicines for mental health; and a category of substances termed 'cognition enhancers' that might enhance the performance of the 'healthy' brain in specific ways, such as enhancing short term memory or speed of thought. This study will culminate with a final report, to be published by the end of 2007, which will include recommendations for public policy and future research needs.

drugsfutures is the public consultation part of this project, commissioned by the AMS and funded by the DTI's Sciencewise programme.

The drugsfutures project was run by a consortium led by OPM and including Dialogue by Design , Think-Lab, the Dana Centre , the BA (British Association for the Advancement of Science), the European Dana Centre for the Brain , the Institute for Public Policy Research and Martin Ince, a freelance science writer.

The online consultation described here, and the associated blog, were run alongside a series of face-to-face events. The online consultation ran from 31st January to 2nd April 2007.

Initial email invitations were sent to 162 contacts identified by the project team and AMS, including key organizations dealing with drugs, addiction and mental health. Examples of organisations that were encouraged to pass on details of the consultation to their members included; UK Youth Parliament, Hull Carers, ADDISS, British Youth Council, Silver Surfers, Families Anonymous (Famanon), Police Foundation, Royal College of Nursing, NUS, Black Poppy and Merseyside Police.
These initial invitations were supplemented by email invitations to 809 addresses from the 'Public Service Exchange' database which includes people from Local Government, NHS, Housing, Higher Education, Regional Government, Central Government, and Criminal Justice.

The consultation was also highlighted through postings on online discussion lists and email networks, and at a launch event at the Science Museum's Dana Centre with associated media coverage.

A blog was set up to allow people to join in the debate in a less formal way than by participation in the full online consultation. The administrator started a total of 19 discussions which were viewed 1641 times, on topics ranging from the scientific (gene

therapy for addiction) to the social (the link between alcohol taxation and drunkenness). Some of the discussion was excellent, especially when a patient and a doctor both joined in debate on depression drugs. But despite the large number of views, no item brought in more than eight extra comments. It was decided in February to stop posting new material to the Blog, in a bid to ensure that visitors to the site contributed instead to the main online consultation. The blog can be viewed at http://www.drugsfutures.org.uk/blog2/blogs/default.aspx

Invitees were asked to register online in order to participate. They were required to provide their name and email address and asked to provide their post code, organisation name, age group, ethnicity and disability status for monitoring purposes.

The online consultation was divided into 5 sections which mirrored those covered at the face-to-face meetings. These were; Drugs and Society, Drugs and the Law, Drugs and Mental Health, Drugs for a Smarter Brain and Drugs and Young People. Participants were instructed that they could chose to begin at any section and that they only needed to answer the questions of most interest to them.

Each section began with a few paragraphs describing a possible future scenario and a link to a downloadable .pdf document giving more detailed background information. Beneath this paragraph were a series of 4-6 questions relating to the section, with space for participants to type their answers. The answers were limited to 1000 character or approximately 200 words.

Participation

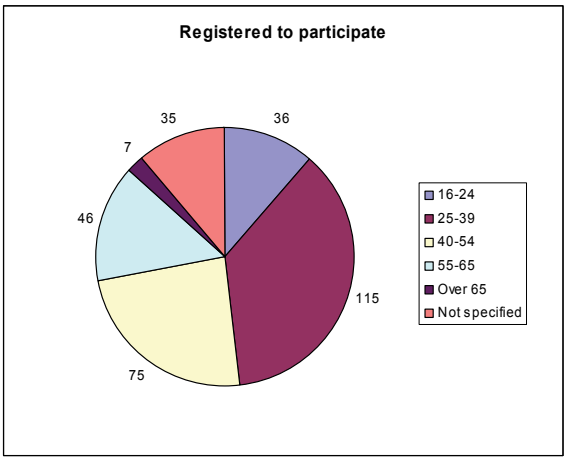
314 people registered on the website. 125 people participated in the online consultation by answering one or more questions. A total of 1659 responses to questions were submitted. A breakdown of the demographics of those who registered to participate and those who participated follows.

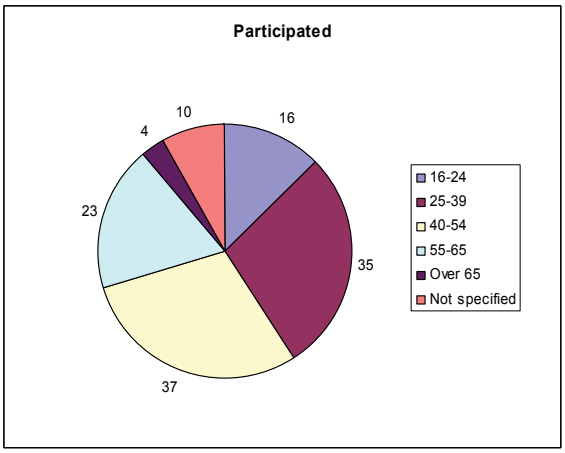
Table 1. Demographics of participants

	Registered	Participated
Age		
16-24	36	16
25-39	115	35
40-54	75	37
55-65	46	23
Over 65	7	4
Not specified	35	10
Ethnicity		
Asian or Asian British	6	2
Black or Black British	3	2
Mixed	3	0
White British	215	87
White Other	45	19

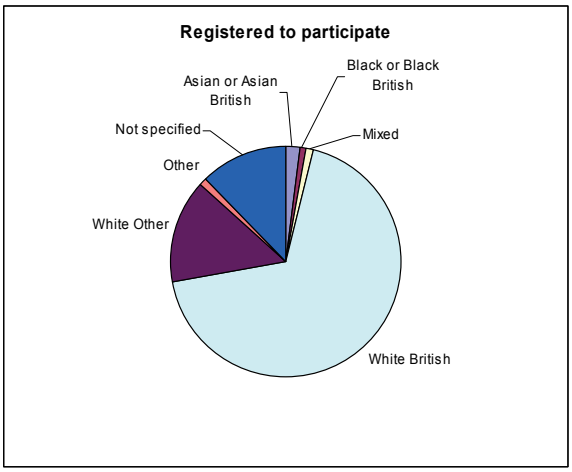
Other	4	3
Not specified	38	12
Registered Disabled		
Yes	15	9
No	270	110
Not Specified	29	6

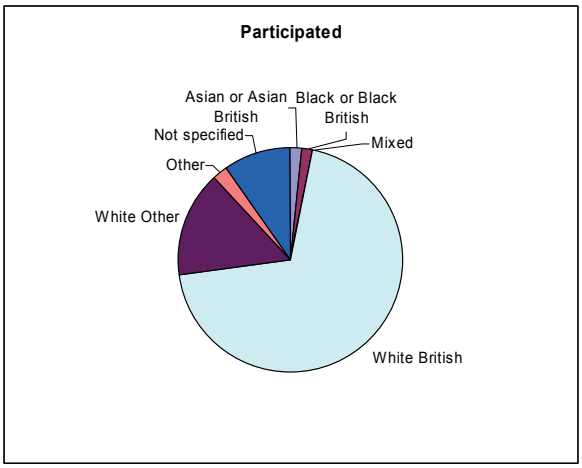
Graph 1. Age of participants



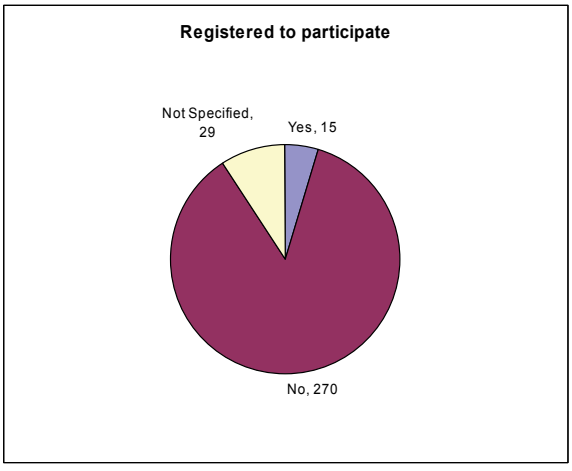


Graph 2. Ethnicity of participants





Graph 3. Registered disability of participants



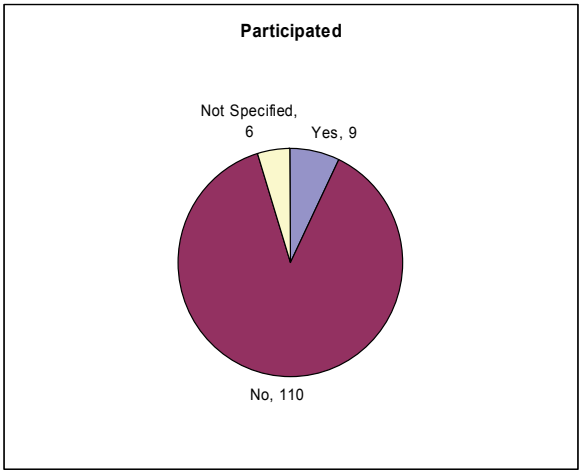


Table 2. Organisations of those who participated in the consultation

137 people listed their organisation when registering, of these 45 participated in the consultation, -their organisation names are listed below.

Organisations of those who participated in the consultation.
AIM (Active Involvement in Mental Health)
Alzheimer's Society
B T P
British Association for the Advancement of Science
Cardiff and Vale Patients Council
Community Safety
Connexions Staffordshire
Crime Reduction Initiatives
Drug Interventions Programme
Enpocket
Government
Haringey Education
Highland Carers Project
INSERM
IPPR
KcWeb
Lancaster University
Legalise Cannabis Alliance
Lifeline Kirklees
Lifeline, Kirklees
Major Pharmaceutical Company : R&D
NHS
NHS
NHS General Dentistry Services
OPM
OU
PCT
Photographer
Planning Service
Post Grad, Oxford
PR Agency for Pharmaceutical clients
SAMHSA
SURP
The Alchemy Project Ltd

Organisations of those who participated in the consultation.
The Ivy Project
UK Youth Parliament
Ulster hospital
Unhooked Thinking
University of Cambridge
University of Lancaster
University of Liverpool
VIA Group (S U group)
WA Drug & Alcohol Office
WRSG, WUF,SWUF
YOT

The results of the online consultation

Interpreting the responses

This report is a summary of the responses received to the online consultation. Throughout the report participants' comments are displayed in italics with the ID number of the participant. These are simply examples to illustrate the types of responses that were received. They are not necessarily representative of the views of other participants.

It must be emphasised that reading this summary is no substitute for reading all the responses in full. To read the responses in full please go to http://www.drugsfutures.org.uk.

It is important to remember, when seeking to interpret the results, that this is a qualitative consultation, not an opinion poll: its primary purpose is to collect ideas, arguments and information. Care must be exercised, therefore, in attributing too much significance to the proportion of responses arguing in one direction or another. The grouping of comments under summary headings should not be interpreted on a purely statistical basis.

The groupings are useful indicators of where there is commonality. Taken in relation to each other, they help to clarify the range of issues and concerns identified by a multiplicity of participants, and where general agreement or specific differences exist. The categorisation of responses is also necessarily simplistic given their complexity, so for this reason again it would be unwise to draw firm quantitative conclusions from them.

Section 1. Drugs and Society

Question 1. What, if any, benefits would there be in developing genetic tests for addiction?

100 people answered this question. Participants were fairly evenly split on whether they felt there were any benefits of genetic tests for addiction or not.

Those who felt there were benefits identified several different types. 45 people felt that genetic testing could enable effort and resources to be focused on the treatment of high risk groups. Participants indicated that this could work towards both prevention of addiction in those with an identified pre-disposition, and towards better treatment of those already addicted. An improved understanding of the causes of addiction that would come alongside genetic testing was generally seen as a positive advance that could lead to prevention and or treatments as well as more social acceptance and sympathetic attitudes towards those with addiction problems.

However amongst this group, several caveats to the use of tests were made. Some participants felt that once the information was available, the individual should be free to make their own choices about how to respond and their rights to consume or use particular substances should not be restricted by government. Several participants commented on

the potential for genetic testing to lead to parents possibly terminating pregnancies in order to avoid bringing an addiction-prone child into the world.

In general this was seen as unacceptable, but some were unsure how this could be prevented from happening.

Some participants questioned whether addiction could be proven to have a genetic basis – and they cautioned against losing focus on the social and environmental factors. Some felt that identifying someone as a having a pre-disposition to addiction would only be of use if there were some positive action that could be taken, or better still a cure that could be administered, otherwise the individual could be stigmatized and socially disadvantaged.

‘An awareness of a tendency to develop addiction could allow prophylactic measures to be taken - knowing that development of an addiction is a possibility can only further caution people against taking part in potentially addictive behaviour. However, people still freely partake in well known addictions - cigarette smoking for example.
A better understanding of addiction could lead to a better standard of treatment and management, particularly from a healthcare perspective, where there is still a lot of prejudice. Proof that addiction is genetic would change a lot of opinions, particularly when dealing with intravenous drug users in a hospital environment, where there is a lot of mistrust and prejudice.’ ID 12

22 people felt there would be no benefit to genetic tests for addiction, often because they did not believe that genes play a large enough part in addiction for the results to be useful. 32 actively disagreed with testing being introduced and felt the any benefits would be outweighed by disadvantages, such as addictive genes being used as an excuse or a self-fulfilling prophecy, or results of tests being misused by insurance companies and employers. Some felt that tests would be too expensive for the NHS to provide and would lead to dependence on drug companies to provide a drug-based cure. Again several people expressed concern that testing could lead to terminations and/or discrimination with negative implications for society.

‘I feel that genetic tests of this sort could lead to a divided society - on one side a very smug group who know that they are unlikely to fall foul of an addiction, and a miserable group of people always wondering what their addiction is going to be. Worse than this, if tests were available before birth it is possible that some unscrupulous people may arrange for otherwise health babies to be aborted.’ ID 52

‘Informed choice is good, information overload is not. On balance I am not in favour as it could be open to abuse by employers and insurers. A genetic tendency does not mean someone will become an addict. Apart from anything else, one person's 'addict' is someone else's 'user'.’ ID 242

Group	**Number of responses in group**
Enables focus on treating high risk groups	45
Positively disagree with genetic testing	32
No benefits	22

Potential to eliminate addiction gene	5
Leads to a cure?	4
Don't know	1
Not a priority	1

Question 2. What is the difference between being told you have a gene that makes you more likely than other people to become addicted to drugs ,and being told that your environment makes you more likely to become a drug user?

97 people answered this question.

On balance participants felt than learning about the environmental impact would be more positive and useful than identifying a genetic influence on addiction. Many participants felt that an environment that was likely to lead to addiction would usually (but not always) be easier for an individual to change, escape from and / or for society to intervene in.

Many felt that it would be difficult or impossible to change a person's genetics and while some felt that genetic testing would enable people to take action to avoid addiction, more felt that this would lead to affected individuals feeling powerless to fight, or prevent, addiction and that some would end up using it as an excuse for their behaviour.

A small number felt that there would be no difference between the two situations. Some felt the impact would depend on factors such as the amount of information available about the implications of each, or on the age of the person being tested.

Some participants focused on the implications for government and society rather than the implications for an individual and, for example, identifying environmental causes was seen to imply that the government should intervene to improve the environment, whereas genetic influences are perceived as a more private individual or family matter which the state should not or could not intervene in.

'Being told you have a genetic predisposition could be interpreted as 'you can't help it', so removing the sense of personal responsibility for your actions. It could also limit a person's belief in their own self-efficacy to change the future, and lead to self-fulfilled prophecy situations.
'Environmental factors' gives a person choices about what they do, and links behaviour to outcome.
A genetic test allows the prospect of punishing people before they have engaged in problematic drug use, by being used as an assessment tool for law enforcement.' ID 39

Group	Number of responses in group
Environment - can change, do something	38
Gene - cannot change or harder to change	19
Gene - no control, more risk of addiction	16
Environment - control, regulate or avoid	14
Gene - likely to give up or pass the blame	11
Gene - forewarn problem, be proactive and avoid	9
Environment - has a significant influence	8
Very little or no difference	7
Addictions are a combination of both	5
Easier to deal with environment factors	3
Cannot give people excuses	3
Corrective actions for both would be different	3
Implications on Government policy	3
Need information about both factors	3
Environment - sometimes difficult to change	2
Gene - can be modified but hard	2
Gene - implies responsibility on parents	1
Dependent on age	1
Question assumes drug use is wrong	1
Gene - lead to punishment before drug use	1
Addiction is just gene related	1
Gene for drug addiction not possible	1

Question 3. Do you think it is better that brain scientists focus their efforts on developing drugs to treat mental health problems or on finding ways to prevent and treat addiction? Why/why not?

93 people answered this question.

24 participants felt that treating mental health was more important, and 16 felt that preventing or treating addiction was more important. However 29 felt that both should be explored.

Some prioritised mental health problems over addiction because they felt they were more prevalent or caused more suffering, or were less as a result of individual choice. Others felt that because they perceived addiction to have more social and environmental causes, addiction should be less of an issue for scientists than mental health.

'I think that brain scientists should focus their efforts on developing treatments for mental health problems. People do, to some extent, have control over whether they are consumed by their addictions. The same cannot be said of mental health problems. Also drug and alcohol addiction is in some part linked to social issues which need to be tackled.' ID1 49

'It is definitely better for there to be research into the cause and reasons for addiction. Before a cure is found the reason has to be found and thoroughly understood. Too much research is carried out (therefore too much money) on finding a drug - seems to be many

'scientists" only answer. More money should be spent on prevention and non-drug treatment.' ID 69

Some participants focused in more strongly on the wording of the question – they felt prevention and finding the causes of addiction or mental health problems was better than developing drugs for either. Some were sceptical about the value of using drugs to treat mental health problems as opposed to prevention (better lifestyles) or alternative treatments (talking therapies etc.)

'It is better that scientists should look at developing safer plant-based healing and recreational drugs that can be used to treat addictions and mental disorders. The current generation of chemical drugs, whether legal or illegal, are dangerous and ineffective. Treating the problem rather than preventing it is all wrong.' ID 280

Those who felt that both should be explored often saw the two as interlinked – they saw addiction itself as a mental health problem which needed treatment, or a result of becoming dependent on drugs that were prescribed for a mental health problem.

'Both efforts are worthwhile and should be explored by brain scientists. Priority should be given to the treatment that yields the highest success rate amongst the individual(s) being treated as this will not only reward the individuals concerned but family and friends connected with him/her. Both drug treatments, i.e. those tailored for mental illnesses and to block potential addictions, therefore, have to be explored in order to determine which is the most successful. If both conditions yielded a successful result then priority should be given to the greater number of people suffering from the condition/potential condition. However, the true results would no doubt be reliant on the individual self administering the developed drugs unless, of course, the individual has been institutionalised and the medication is administered to them by a medical staff member.' ID 172

Group	Number of responses in group
Both should be explored	29
Treat mental health problems	24
Should not necessarily use drugs	16
Prevent and treat addiction	16
Prevention is better than cure	7
Alternative suggested	6
Both similar issues	4
Cannot compare the two	3
Comments on structure of question	2
Don't know	1
Prevent mental health issues	1
Dependent on which has a greater impact on society	1

Question 4. Over the centuries many people have used drugs for different reasons, such as for enjoyment, escape or to enhance their creativity. What, if any, limits should we place on people's rights to enjoy drugs if they want to?

92 people answered this question.

Almost half of participants felt that limits should be placed on drug use only in order to prevent harm to others. Whilst on the surface this may appear to be fairly lenient, what people considered to be harm to others varied. Some people limited this to immediate safety risks to the user and others – e.g. accidents of injury resulting from intoxication, but many included the effects on the users family, drug-related crime, violence, and social problems resulting from family disruption and the economic cost of treating drug users when necessary.

'Provided such drug use has no impact on anyone else, they should be free to try what they like. However, the reality is very different. Drug use inevitably has an impact on a user's health, relationship with their family, ability to cope at work etc. Many people feel that they can enjoy the odd sniff of cocaine in a controlled environment and continue to lead a very normal life. It is true that this can have little or no impact on anyone else and cause no harm. But there are many people whose lives, and the lives of people around them, are completely ruined by drug addiction. These people need protection from themselves especially if they are carrying an addictive gene. The only way to do this is by controlling the availability of drugs through legislation and educating people of the dangers.' ID 169

14 people said no limits should be in place, often stating individual choice and responsibility as the reason. Several people stressed that this should go hand in hand with sufficient education so that people understand the risks they are taking. Some respondents felt that removing limits to people's enjoyment of drugs i.e. legalisation, would reduce the cost of drugs, remove illegal dealers and therefore reduce drug-related crime and its consequences.

'No limits should be placed. Rather than living in a nanny-state (which we increasingly are it seems), people should be left to decide what they want. If a person decides to take cocaine, and they are informed of the risks, then it is their decision to make. People should still be educated about the serious dangers of drugs, but ultimately it is their decision whether they want to involve themselves in them or not.' ID 140

12 people suggested drugs should be limited to certain age groups, often to those over 16 or 18 but some also said over 21 year olds. The concern was mainly about a need to prevent young people from damaging their developing brains. Many of these respondents believed that other than age restrictions, drugs should be legal and available to use by competent adults. Again education was mentioned several times as being necessary.

Some people felt that limits should be placed on certain drugs but not others e.g. cannabis versus heroin or crack cocaine. Others felt that accessibility of certain drugs should be allowed but controlled' for example by allowing only a small amounts to be purchased, or allowing use for only a limited amount of time. Some felt that it was acceptable for people to use drugs for enjoyment but that this should not be actively promoted or used for commercial gain. A small number of people felt that drugs of any kind should only be allowed on prescription, and for medical rather than enjoyment purposes.

'I know I am probably rather old-fashioned, but I do feel society would be a better place all round if drugs were not used for any of these purposes.' ID 52

Group	**Number of responses in group**
Limit harm to themselves / others / society	41
Need for education	18
People should be able to choose	14
No / few limits	14
Limit age	12
General comments	7
Limit use of drugs	5
Some drugs should remain illegal	4
Limit sale / promotion of drugs	4
Limit to avoid crime and violence	4
Limit availability	3
Do not use drugs for enjoyment	2
Limits should be the same for all drugs	2
Drugs should remain illegal	2
Limit drugs for medical purposes	2
Limit to type of citizen	1
No comment	1

Section 2. Drugs and the Law

Question 5. How do you feel about the 'punishment' that Frank has received as an alternative to prison? Is there anything else that you think should be done to help him?

81 people answered this question.

21 felt that the scenario was too controlling or draconian, comparing it to worlds described in '1984' or 'A Clockwork Orange'. Some felt that banning Frank from what for many are normal social encounters (going to the pub) was too harsh and that it would not work. 18 people, whilst not particularly happy with it, felt that his punishment was better than prison. 5 felt that while the punishment may be acceptable it should not go on indefinitely and Frank should be given a chance to prove that he has changed. 6 participants felt the punishment was appropriate.

15 felt that the addiction and criminal activity (such as theft) should be separated and that Frank should expect to pay for his crimes. A small number of these people felt that his punishment was too lenient.

'Frank made his choices and knew the punishments associated with them. He can't blame the drugs for his burglary - it was his choice, and certainly not the choice of the people he robbed. Frank also cannot blame his genes - again his choices are just that - his.
I consider Frank lucky to be have been given the choice of not going to prison. Particularly when compared with today, where crimes like this are rarely punished even by a fine.' ID 32

Around half the participants (42) felt that Frank should receive treatment and support to beat his addiction rather than solely having his movements restricted, or being forced to have injections that remove the craving. Many people suggested that non-medical interventions like talking therapies, group work, drug dependence counselling, or assistance with identifying the root cause of his problems, should either be used in conjunction with punishment or replace it entirely.

'It may be a viable alternative in this case but does little to advance policy in this area. I would hope by 2025 better alternatives to electronic tagging would be available. Such alternatives should rest on the decriminalisation of all drugs, and their proper regulation under national and international law. This would help poor Frank more than any technical 'solution' to his drug use. There is little evidence that compulsory drug treatment works in isolation of any change in an individual's socioeconomic status, their living environments, their work and education opportunities etc.' ID 92

Group	Number of responses in group
He should receive treatment and support	42
The scenario is too controlling / draconian	21
Its better than prison	18
He should be punished for his crimes	15
Drugs should be legally available	11

Its appropriate	6
The punishment should be time limited	5
Education and prevention	2
He could not help his behaviour	2
Don't know	1
People should be allowed to intoxicate themselves	1
The scenario is very unlikely	1

Question 6. Should we treat people who are addicted to illegal drugs as people who are ill and need medical treatment or as criminals?

79 people answered this question.

48 felt people who are addicted to illegal drugs should be treated as people who needed medical treatment and not as criminals. Several acknowledge the link between addiction and criminal offences such as theft in order to buy drugs, but felt that treating addiction should be the priority as it would prevent further crime in the long run. Some felt that both approaches are needed – i.e. punishing crimes but providing treatment for addiction at the same time, for example in prison.

'As people who require medical treatment. There is little point in punishing addicts. Sending them to prison may even put them in a position where drugs are more available, and it won't help rehabilitate him. Addicts should be treated and helped back into society where they can contribute, rather than being punished and be a drain on the taxpayer. 'ID 244

9 felt that criminal offences, including using illegal drugs should be punished and that addiction should not be a sufficient excuse for crimes. Repeat offenders particularly should be deemed to have made a choice to be criminals and not treated medically.

Several participants felt that neither approach was appropriate as drugs should be legalised, people should be treated as individual human beings, or people should accept personal responsibility for the effects of drug taking. Some people challenged the term 'ill' – they acknowledged that help was needed but some felt that this need not be medical help.

Group	**Number of responses in group**
As people who need medical treatment	48
Relationship between crime and addiction	14
Criminal offences should be punished	9
Neither	8
Both	8
Challenge the term ill	6
Need to legalise drugs	5
Need to take personal responsibility	1

Question 7. What effect do you think harsher legal punishments would have on people who use illegal drugs?

75 people answered this question. Most participants seemed against the idea of harsher legal punishment. However, 11 people were in favour, some of these felt punishment would discourage some users and might act as a deterrent, especially to those not already addicted. The rest of the people who answered this question felt it would make no difference to people who use illegal drugs (28) or would only have a negative effect on drugs users, especially those who have already become addicted, and on society in general.

'It may deter a few from starting in the first place but those who are addicted would use anyway. Using despite adverse consequences is one of the diagnostic criteria for addiction see DSM-IV American Psychiatric Association).' ID 102

Negative effects of harsher punishments put forward by participants included: making users more desperate or careful to avoid capture, driving up prices, (and therefore) increasing the number of drug-related crimes, increasing the number of people in jail and increasing drug use overall.

'I think harsher legal punishments would deter people who use illegal drugs casually but would have no effect on people who are addicted. it may even deter addicts from seeking help to overcome their addiction.' ID 87

'It will further impoverish them, it will further discriminate against them, it will further exclude them. It will have effects on the whole of society. It will make society less fair, less inclusive and less sustainable. It will increase crime, and increase the levels of violence criminals will use to protect themselves. In turn, this will increase the levels of violence the State uses to combat criminals.
The only effect that harsher punishments will definitely not have is to reduce the amount of drug taking in Society. The opposite will occur. Because of their illegal status, and as a response to the hysterical media coverage of the issue, younger and less educated people will be more attracted to starting to take drugs. Riskier drug taking will replace less risky, and the overall harm caused will increase.' ID 308

11 people put forward the idea that support or rehabilitation would be a more successful way to deal with the perceived problem.

Group	Number of responses in group
Will make little / no difference	28
Comments about support / rehabilitation	11
Will increase crime related activities	11
Will discourage some users	11
Comments about addiction	8
Will discriminate against them	7
Dependent on type of punishment	6
Will increase numbers in jail	5
Will affect society	4
Will make things worse	4
Will increase want to use drugs	3
Will not reduce drug use	3
Will make them more careful not to get caught	3
Drugs should not be illegal	2
Will make them more desperate	2
Will reduce drug use	1
Don't know	1

Question 8. If drugs that are currently illegal were available at the local chemist or supermarket, what impact do you think this would have on the problems that we now associate with illegal drugs?

75 people answered this question. 45 felt that such an approach would lead to a reduction in drug-related crime as prices would be regulated, and the link between drugs, gangs and gun crime could be broken. Some believed that removing the black market would enable drug producing countries to gain a legitimate income rather than money going to drugs barons, and some mentioned the income for national and local government that might be generated through taxation.

'I personally believe that having what are now considered illegal drugs, to be legally available at the local chemist would be a positive move. Firstly it would mean that the buyer would know exactly what they were getting, drugs would be cleaner and the amounts would be known, reducing the risk of overdose. Secondly this would take it out of the hands of criminals, there will always be a black market but it would be reduced. Therefore I think this move would benefit not only the individual but also society as a whole.' ID 48

17 people felt that the drugs would be cleaner and safer, therefore preventing some of the negative impacts of drugs such as overdoses, illness, or people becoming out of control. Although many thought that this might reduce crime, this does not mean that respondents were totally in favour of such a move, many could foresee problems such as increased use of some drugs (particularly if they were promoted by chemists and supermarkets for profit-making), and therefore increased levels of addiction and mental health problems and a knock-on effect on the health service.

'There would be more people with mental health problems, but there would be less crime. Our mental health bills for NHS will soar.' ID 18

13 people felt that attitudes towards drug use would change – whilst use would be more accepted, some of the stigma would be lost and people would feel more able to seek treatment for addiction or misuse when necessary. Several people felt that the impact would depend on the type of drug in question and felt that it would be ok for some e.g. ecstasy and cannabis to be available but not for others like cocaine. 8 people stressed the need for education and harm reduction measures to be in place if any such move was taken.

'It depends entirely which drugs and how they were sold. If cocaine for example was sold over the counter no questions asked then you would see a rise in use, addiction and health problems. But if drugs such as MDMA, cannabis and LSD were sold in quality controlled packs, with warning labels and information given out to customers you would see a withering of the black market and an increase in the users health.' ID 21

Group	**Number of responses in group**
Decrease in crime / associated problems	45
Drugs would be cleaner / safer	17
Attitudes to drugs would change	13
Increase in use	9
Need for education / harm reduction	9
Impact dependent on drug type legalised	8
Increase in addiction	7
Drugs would be cheaper	5
Decrease in use	5
Increase in crime / associated problems	5
Increase in revenue for government and community	5
Increase in health care costs	3
No effect	2
Should only be available in chemists	2
Drugs should remain illegal	2
This situation will not happen	1
No value in making drugs readily available	1
Decrease in excitement of drug use	1
Implies that use of drugs is okay	1
Decrease in addiction	1

Question 9. Why do you think people start taking illegal drugs, despite the risk of punishment?

77 people answered this question.
A wide range of possible reasons for illegal drug use were suggested. Many participants talked about the pleasurable effects of drugs, such as feeling happier, more powerful or invincible. Some felt that a desire to experiment with changing the state of a person's mind is part of human nature and several people mentioned simple curiosity as a motivating

factor. Others felt that the excitement of doing something illegal and the challenge of not getting caught played a part in making drugs attractive.

Others discussed the use of drugs in order to alleviate negative feelings, to escape from unpleasant things such as pain, boredom, and the stresses of everyday life. Some felt that if people understood more about the risks of addiction and the other negative effects of drugs use then they would not be drawn to them. Other said that the feeling that 'it will never happen to me' meant that some people ignored the risks even though they were aware of them.

Many participants cited the wider social reasons that may lead to people using illegal drugs or prevent them from resisting them, such as peer pressure, a desire for rebellion, and social deprivation / lack of aspiration. 12 people said 'because they can' – i.e. because the drugs are freely available in many cases and some people feel it is their right to use them.

Some of the participants discussed the reasons people risk punishment for drug use. They cited a lack of respect for the law, a feeling that the risk of getting caught is low, and that punishments are lenient and therefore not acting as a deterrent. Addiction came up several times – people may start using drugs for some of the reasons above but once they become addicted they either have, or feel they have, less of a choice about their drug use. The influence of addictive personality or genetic predisposition to addiction were mentioned but came up rarely.

'Because the pleasure they give is worth the risk. People don't like to be dictated to about such things and feel able to make their own minds up about them. Most people see the law as outdated and arcane, and hence not worthy of upholding. ' ID 240

'People don't start taking illegal drugs - SOME people start taking illegal drugs. This is a question that could be applied to many 'illegal' or socially unacceptable situations, not only drug taking. People do it because they are human beings and have their varying reasons. Some people are in more vulnerable environments and may be pressured or learn to take drugs, some people are genetically predisposed to same, some people do it to 'find out for themselves', some people weigh up the risks and decide the risk is worth taking i.e. 'they' won't get caught therefore won't be punished by the system. People who take drugs are usually in possession of some information about what they are about to do and the consequences to themselves and to others of such action - they weigh the risks and take the choice. There is no simple answer to this question.' ID 172

'For the majority of users it is simply because the use of drugs is pleasurable. They see friends or family enjoying them and learn that many of the different drugs are not as dangerous as the government makes out and so try them out of curiosity. Those that enjoy them come back for more. There is an obvious human desire for human intoxication as the widespread use of drugs and alcohol shows, and the risk of punishment is small compared to the immediate benefits of drug use. ' ID 244

Group	**Number of responses in group**
To derive pleasure or feel powerful	27

Peer pressure	27
To escape from everyday life	15
Because they can, even though it is illegal	12
Curiosity	10
Lack of education and understanding	10
To rebel	9
The challenge of not getting caught	8
Punishments are lenient	6
To experiment	6
To change their state of mind	6
Boredom	5
Lack of respect for society and its laws	3
For medical reasons to relieve pain	3
Comments about question	2
To appear invincible	2
Addictive personality	1
Lack of aspiration to achieve	1
Refer to another question	1

Section 3. Drugs and Mental Health

Question 10. Are drugs the most effective or appropriate treatments for all mental health problems, from mild depression to more severe problems? Why/why not?

67 people answered this question. Just one person said yes without any caveats, because they felt that talking therapies are abusive (they did not elaborate). 6 people said yes with caveats, usually saying that drugs should be used as a last resort or for the most serious cases only and that side effects should be considered and natural alternatives researched where possible.

'Only if the condition is incapacitating or dangerous to the person affected or others. A bit of eccentricity makes the world go around and progress is usually achieved by bloody minded monomaniacs.' ID 242

Of those who said 'No', 20 felt that a combination of therapies would be more appropriate, often including drugs, but also talking or behavioural therapies, alternative medicine, healthier lifestyles (less stress, more exercise). 11 people felt that the approach should always be tailored to the individual, and some felt the individual should have more control over which drugs they took and in which doses, rather than a 'one size fits all approach' being taken. A number felt that finding the cause of mental health problems and seeking to address them would be more effective, particularly in the long term.

'No - we need a carefully worked out and evidence based approach that is a combination of talking therapies and drug therapies. Drugs are only ever part of the answer. We also need action on the societal conditions that foster mental illnesses' ID 8

Several participants mentioned the negative side-effects of drugs or the feeling that drugs were over-prescribed due to laziness or ignorance on the part of GPs and/or the pharmaceutical industry seeking to make a profit. A small number of people mentioned illegal drugs as alternatives to prescription drugs.

'NO, because many people who visit the doctors with [depression] are suffering because of issues/emotional trauma through loss of loved one/friend/job etc, anti depressives such as seroxat etc are the last thing such people need, maybe only time can heal this type of emotional upset. Having taken lithium sulperide seroxat &haloperidol myself for many years, apart from the lithium I and my partner of 12 years have been able to vary the dosages of my other medications so I only take them when I know I need them, this was after many rows with my GP who now accepts that I am competent to do this, far to many prescriptions are at set dosages/times with no option for change, a lot of people are zombies because they are made to feel powerless + by GPs who just write repeats. They have a bad habit of thinking they know more about a person than the person concerned does.' ID 77

Group	Number of responses in group
No - need a combination of therapies	20
Dependent on individual	11
Possibly / sometimes	7
General comments	5
No - alter behaviour / lifestyle patterns	5
No - cause of problem should be assessed	4
Dependent on drug	4
No - need to deal with cause	3
No - drugs have side-effects	3
No - regular exercise is more effective	3
Yes - only more severe conditions	3
No - can often make a situation worse	2
Yes - only if therapy does not work	1
Yes - but consider side-effects	1
Yes - except for worst cases	1
Should look at root of problem first	1
Yes	1
No - prohibit long-term use of drugs	1
No	1

Question 11. If we as a society decided that we should not use drugs for a particular mental health problem, what other approaches might we take to these problems in the future?

60 people answered this question.
A number of participants acknowledged that drugs can be effective and felt that if a drug was proven to work with acceptable side effects then alternatives would not be necessary. Just one person felt that a chemical for every mental health problem could be identified eventually.

31 people suggested talking therapies as alternatives to a solely drug-based approach. Whilst some participants were very general about this, others specified particular approaches such as Psychotherapy, group therapy, counselling, Cognitive Behavioural therapy or neuro-linguistic programming. Natural and alternative remedies came up several times, including relaxation, herbal remedies, reflexology, acupuncture, hypnotherapy and meditation. Several participants felt that helping people to live healthier lifestyles (improved diet, exercise) or to achieve a better work-life balance and reduce stress would be effective in preventing or relieving mental health problems.

Support, love and understanding from friends and family was commonly mentioned as being important. Some people mentioned re-instating family values, other felt that providing someone to talk to and share problems with could often go a long way. Support from wider society, through better provision from the health and social services was often mentioned, sometimes as a surrogate for a perceived lack of family support. A greater understanding and acceptance of mental health problems by society came up several times, and education was mentioned as potential way to bring this about and to stop people feeling stigmatised and unable to discuss their problems. Other alternatives to drugs suggested less often were residential care and prison, genetic treatment, or surgery.

'Provide safe and pleasant places staffed by kindly people with commonsense who would be available just to chat to people when we sufferers need a retreat from the world and a relief from our distress. the causes of mental ill health are varied and complex but as human beings are complex. a little bit of TLC would go a long way to healing some of our scars. CBT and other talking therapies may help some but all of us need a little bit of love , good food and regular exercise in the fresh air.' ID 62

'We need to address the roots of many problems which affect the health, both mental and physical. Until we do this, we as a society are failing to care for each other. There is no quick fix for mental health problems, despite the claims of drug companies and the vote catching statements of politicians. It's a long term job, unfortunately.' ID 123

As in other questions, a number of participants felt that treatments for mental health problems should depend on the condition, the individual, or the identified cause of the problem and some felt that it was acceptable to use whatever method(s) had been proven to be effective.

'I think such a decision would be taken by society only if doctors felt a drug were ineffective. I cannot see a situation where if a drug worked and helped someone with a mental health condition then society might choose not to use it. I feel our concern should be the fair distribution of such treatment and whether the patient wishes to be treated.' ID 186

Group	**Number of responses in group**
Talking therapies	31
Social or family support	15
Healthier lifestyles	9

Drugs can be effective	8
It would depend on the condition	8
Natural / alternative remedies	8
Whatever is proven to be effective	6
Tailor treatment to the individual	5
The scenario is very unlikely	4
Better education or acceptance by society	3
Answer given elsewhere	3
Better work-life balance	2
Tackle the root of the problem	2
Residential care or prison	2
Genetic treatment	2
Not talking therapies	1
Surgery	1
Comments on specific drugs	1

Question 12. If someone is diagnosed with a mental health problem and there is a drug available which might help them, should they be required to take it and why/why not?

64 people answered this question. 14 people felt that no-one should be forced to take a drug in any circumstances, feeling that it would be violation of someone personal freedom. Some of these respondents felt that enforcement would be counter productive – it would lead to mis-trust and resentment of the medical profession and would not work in the long term.

'They should never be required to take any drug. You can't force someone to take a drug if they don't want to. The best we can do is encourage them to take it but we can't violate their freedom and force them to take the drug. It's that simple.' ID 256

3 said 'yes' without expanding on their reasons. Many others said it would be acceptable but only under certain circumstances. 28 felt that it only be acceptable to require a person to take a drugs if they were a serious danger to themselves or others.

'Difficult - I think it might depend on how serious their behavioural problems became if they didn't take it. To force someone to take a drug is infringing their human rights. On the other hand if they are a serious nuisance or danger to society (and perhaps to themselves) if they don't take the drug then other people's human rights may need to come first. 'ID 165

'1. A lot depends on who defines what is and what isn't a 'mental health problem'? Can we trust the politicians not to medicalise dissent?

2. Assuming someone posed a threat to others then I might answer yes.

3. Is it going to happen - No. Because it would be virtually unenforceable because of the cost.' ID 102

Others felt it would be acceptable only if the diagnosis was definite, if the drugs were proven to solve the problem, or if their effects were carefully monitored and evaluated. Some felt that drugs could be used as a last resort approach for serious cases and/or where other approaches had been tried and failed. A few mentioned that drug treatment would be acceptable only if the next step would be locking the person up in prison or a secure unit.

Group	Number of responses in group
Only if they are a danger to themselves or others	28
People should never be forced to take a drug	14
Depends on the individual	8
Only if drugs will definitely help	7
Only as a last resort	5
Only as an alternative to prison	3
Yes	3
Only if followed up and evaluated	2
Don't know	2
Comments on specific drugs	1
it would be impossible to enforce	1
Only if the diagnosis is certain	1

Question 13. Are there any mental health drugs that you should be able to buy at your local chemist, without a prescription?

60 people answered this question. 18 said 'No' without expanding on their reasons. 16 said 'No' because they felt that this would remove the input from medical professionals which was deemed essential to ensure diagnosis was accurate and the correct drug for the problem / individual was prescribed at the correct dose. Some felt that self-diagnosis and easy availability of drugs would lead to inappropriate or unnecessary use.

'No. because then everyone would think they have a mental health problem, and not all types of drugs suit certain people, for example, there are different types of drugs to deal with different types of depression, such as SSRIs or MAOIs. And many people would think they were depressed and start taking them and then it would all go wrong.' ID 24

Several participants did feel that it would acceptable for mental health drugs to be available without a prescription in some circumstances. For example, where the condition was mild (e.g. mild depression), where the effect of the drug was mild and had few side effects. Herbal remedies or 'natural' drugs such as St John's Wort were mentioned several times. Some participants mentioned specific, currently illegal, drugs that they thought should be available without prescription such as Ecstasy, MDMA, LSD, cannabis and designer drugs generally. Where reasons for this were given, these drugs were seen to be useful in certain cases (e.g. cannabis for pain relief), and not to have serious side effects or be highly addictive.

'This would largely depend on the nature and effect of the drug concerned. If it was a very mild 'mood enhancer/lifter', which had a short-lived and mild effect then, perhaps, yes, it should be available over the counter. These pills are already available in the 'natural remedies' market (St John's Wort). All the while people self diagnose, rightly or wrongly, I believe that stronger mind altering drugs should be treated with caution and qualified clinical advice should be sought before such drugs were made available to the person seeking them.' ID 172

'Drugs for mild/moderate depression or anxiety should be offered over the counter at pharmacies, as they could then be readily available to anyone at any time who might need a short term help with feeling depressed.

However the stronger medication for more serious conditions should still be prescribed by the doctor/consultant.' ID 235

Group	**Number of responses in group**
No	18
No - medical advice and diagnosis is essential	16
Don't know	8
Yes - natural / herbal remedies	6
Yes - mild drugs without side effects	6
Yes- cannabis	5
Yes	4
Yes - drugs for mild conditions	3
Comments about the question	2
Yes - Ecstasy / MDMA	2
Yes - LSD / hallucinogens	2
They already are	1
Yes - drugs that do not cause physical damage	1
Yes- alcohol	1
Yes – Narcotics	1
Yes- Antidepressants	1
Yes- designer drugs	1

Question 14. What mental health problems can you think of for which new drugs should be developed for in the future?

55 people answered this question. The suggested problems for which new drugs should be developed were; depression, diseases of later life (dementia, Parkinson's etc.), addiction, stress and anxiety, psychoses, bipolar disorders, behavioural problems (such as attention deficit hyperactivity disorder), obsessive compulsive disorders, learning / development disorders (such as dyslexia or autism), post traumatic stress, and self harm. Some respondents talked about improving drugs for existing conditions more generally, by reducing side–effects, improving effectiveness and removing contra-indications, and a number of people stressed that this should be achieved before drugs were developed for newly identified mental health conditions.

'Drugs are likely to be relatively ineffective in treating milder mental illnesses compared to other types of helps. I think most mild depressions, anxiety and stress result from social causes and only social policy changes have any hope in combating them. These cases represent the vast majority of mental illness in society today.

A fast growing group of disorders, known as eating disorders, represent this reality. It is not irony or coincidence that we have many young sufferers of malnutrition in a supposedly well- fed population. The social constructs surrounding nutrition are distorted by political and commercial priorities, so that we are all being harmed, and some of us develop specific self- harming responses. It is all learned behaviour. To remedy the problem, we have to address the context and content of that learning.

A few treatable mental conditions exist which could benefit massively from better drug therapies: conditions of aging (Parkinson's , Alzheimer's, etc.), and acute somatic distortions (schizophrenia, etc.) Some may not be curable!' ID 308

Some of the 9 people who said 'None' expanded on their answer, and some of these expressed a feeling that drugs are not the answer to mental health problems so developing drugs should not be the focus of efforts.

'None.
Better drugs should be developed for the serious conditions that exist today - not creating new drugs for conditions that are a bit 'wishy washy' or may just be symptoms of a dysfunctional society rather than real illness. ' ID 32

Those who talked about drugs for social problems were usually making the point that here are things other than mental health that cause problems in our society (e.g. religious extremism, the cult of celebrity, war etc.)

Group	Number of responses in group
Improve drugs for existing conditions	11
None	9
Depression	9
Diseases of later life - Alzheimer's etc.	8
Don't know	7

Addiction	6
Stress and Anxiety	6
Social problems	6
Seek alternatives to drugs	6
Psychoses	6
Bipolar disorders	5
Do not create drugs for new conditions	3
Behavioural problems	3
Obsessive Compulsive Disorders	2
Learning disorders	2
Post-traumatic Stress	1
Self-harm	1
Comments on the question	1

Question 15. Should drugs be developed for conditions that we currently see as features of someone's personality, like extreme shyness? Why/why not - and what might the consequences be?

61 people answered this question. Participants seemed to be fairly evenly split about whether this would be a good idea or not. People gave various reasons and lots of qualifications in both types of response.

Many of those who said 'No' did so because they felt that other treatments, such as therapy, would be more effective, and that drugs would not be the answer on their own. Two people were concerned that developing new drugs for such conditions was motivated more by profit than genuine need.
Some felt that medicalising something that was just part of someone's personality was simply wrong and some felt that doing so could lead to homogenous society, lacking in variety and creativity.

'If, by shyness, it is meant 'not at ease in the company of others', then I believe there are less invasive ways of dealing with this. Psychologists and counsellors should be able to address the 'problem' quite effectively, but only if it affects the person so badly that they are unable to interact socially and seek help for such a 'problem'. Who will decide which 'features of someone's personality' are desirable or undesirable? The media? Could this boil down to fashionable notions in a period of time? Diverse personalities form the fabric of a colourful human existence and what is seen as undesirable by one person is seen as desirable by another.' ID 172

Those who said 'Yes' often qualified this by saying that drugs should only be developed if there was a genuine need, expressed as demand on the part of sufferers and / or proof that they stemmed from a real physiological problem. Many felt that the taking of these drugs should never become compulsory. Some felt that these would be a good alternative to self-medication using more damaging drugs, provided they could be shown to be effective. However the potential for them to be misused was raised.

'Yes. However they should be viewed as only one possible solution to a problem, rather than a 'one size fits all' remedy. The individual should be equipped with suitable advice and given an opportunity to try a particular medication to determine it's effectiveness and possible value. If an individuals quality of life is improved and they wish to continue, all well and good. If quality of life is decreased, a suitable choice can be made.' ID 289

'Yes, of course. If a person wants to take away their extreme shyness they should be able to do that. Anger, extreme shyness, etc. are all negative personality traits that many people would like to get rid of. Of course though it is all up to them and no one should force a person to take a drug that alters their personality. But should drugs be available to help people with negative personality traits if they want to get rid of? Of course.' ID 256

Group	Number of responses in group
No - use alternative treatment	20
Yes - if there is demand and its not compulsory	14
No - changing someone's personality is wrong	10
Not if it would lead to a homogenous society	9
No	7
Existing drugs / Self-medication	4
Yes	3
No - it would just be for profit	2
Yes - with sufficient research	2
Yes - for short term use	2
Yes - but potential for misuse	1
Yes - if they are free and non-addictive	1

Section 4. Drugs for a Smarter Brain

Question 16. Who should be allowed to use cognition enhancers, should they be available to everyone or should they be regulated for use by people with particular jobs?

61 people answered this question. 19 participants felt that such drugs should be available to everyone that wanted to use them. They sometimes qualified their response – by saying they would ok provided they have been carefully tested and shown to be safe with no side-effects, and provided they are supplied to adults who are aware of the potential risks of using them.

Several people felt that if they were introduced, people should not be (or feel) forced to take them. Some were concerned that employers would begin to require their use, or make recruitment decisions based on whether someone was willing to use them. 4 people felt that they should be available to all, provided people disclosed their use to relevant people (educational establishments, employers, doctors etc.).

Of the people who felt use of cognition enhancers should be restricted, 11 felt they should only be used by people who had been diagnosed with a recognised medical need, such as age-related mental degeneration, and should only be available on prescription. Some people felt their use should be restricted to people with particular jobs that involve the safety or wellbeing of others such as nurses, doctors or teachers. Some participants were worried that if they were available for non-medical use, and people were allowed to use them at school or work, that there would be negative consequences for society.

'No-one should be allowed to use cognition enhancers for material gain.
The danger of allowing cognition enhancers for academic or employment use is in there being too much emphasis on peoples' abilities rather than on their intrinsic value as human beings. People with disabilities deserve equal opportunity and respect and for able people to consider their value is too bound up in their success and achievements implies that there is a hierarchy of worth based only on achievement. What makes us human is our ability to love ourselves and each other unconditionally. Conditional factors should come later in our self-valuing.
Let's keep the emphasis on the Human Being, not just on the Human Doing.' ID 9

13 people felt that cognition enhances should not be available at all. Other were not sure and felt that more research into their effects in the long and short term is needed.

'More research needs to be done into the long term effects before they are licensed for wider use. I don't really have any principled objection to their use - there are arguments that raising the IQ of the population as a whole would result in a happier, more wealthy society, which has to be good. I suppose my concern would be their use for coercive reasons - which would, I think, be inevitable to some extent, given the increasingly authoritarian direction in which government is heading. Someone suggested that they may have value for young people who are vulnerable to drug use - interesting, but again, much more research needs to be done.' ID 19

Group	**Number of responses in group**
Everyone	19
No-one	13
People with a recognised medical need	11
Not for improving work performance	8
Employers must not influence their use	5
People with particular jobs	5
People should disclose their use	4
Careful testing is needed first	4
Adults who are aware of the risks	4
Don't know	3
Depends on side-effects	3
They will be used illegally anyway	2
Alternatives are better	2
Don't believe they will work	1
Questions about how they would work	1

Question 17. Do you think that children and young people should be allowed to use cognition enhancers in the future, for example, to help with exams or job interviews? Why/why not?

58 people answered this question. More seemed to be against young people using cognition enhancers than for it. Some of those who said 'Yes' felt that young people should have the same right to use them as anyone else. Some felt that provided there were no side-effects, they were taken under adult supervision, or there was a recognised need for them they should be allowed.

'As long as they are thoroughly researched and approved as safe to be administered in the home, without serious adverse consequences in the long term, that decision should be left with the parents and child. If a particular substance can safely help with examination nerves, memory, concentration, confidence etc, then why not use it to boost your child's chances in a competitive society. If cognition enhancers can be developed that help with behavioural/social problems in children, then let's hand them out.' ID 42

Those who said 'no' most often cited the potential for negative long-term effects such as dependence or addiction, increased competition and stress, and the impact on development of the brain or intellectual abilities. Some felt that use of cognition enhancers would lead to an unfair advantage, especially if the drugs were only accessible to wealthier families. A few felt that young people were too young to make an informed choice and that there was a potential for ambitious parents to push children to use them.

Some participants felt that it is important to recognise the value of diversity within society, and discussed different types of intelligence, originality and creativity.

'I don't think children & young people should be allowed to use cognition enhancers, because it would give an unfair advantage to the richer families who could afford to pay for them.
Unfortunately due to the way our society is run they will be available to the young, and the poor will probably have to steal to gain their share. which opens another problem which isn't there now.
so a lot of thought will have to be given on how these are distributed fairly.' ID 205

'Only the legal and readily available enhancers such as diet, exercise, supplements etc. Other drugs, if used by children and young people, could become something which is depended on and increase pressure, unhealthy competition and a desire to find better, stronger, longer lasting etc drugs. What happens when the drug wears off, if they forget to take it one day, develop an allergy or intolerance, cannot get the drug or have parents who are not prepared/unable to give their child what might become commonplace for others? People may forget that there are plenty of 'normal' ways to enhance ability that go hand in hand with a healthy body and mind and are readily available, often at no or little extra cost and can enhance a child's total well being - not just their academic attainments.' ID 11

Group	Number of responses in group
No - may have long-term effects	10
No - may impact on development	9
No	9
Yes - only if safe / no side-effects	7
No - may lead to inequalities	6
No - not at a young age	6
No - should be differing behaviour / intelligence	5
Yes	3
Refers to another question	3
Yes - under controlled / certain conditions	3
Comments about cognition enhancers	3
No - will impede choices	2
No - will lead to drug use for all parts of life	2
Don't know	2
Dependent on individual	1

Question 18. If cognition enhancers become widely used by adults, young people and children in the future, should employers and schools be allowed to test their employees or students to check if they are using them? Why/why not?

55 people answered this question. 12 said 'Yes' to testing for cognition enhancers, reasons included maintaining fairness (between exam candidates or job applicants), to monitor users' health, and to discourage the use of cognition enhancers in circumstances where they were not permitted. Some felt that only schools or parents should have access to tests, but that employers should not be allowed to test their employees. A small number suggested that people should be open about whether they were using cognition enhancers rather than being forced to have tests.

'I just don't think they should ever become widely used, so yes, I think employers should be able to test for them, as they can today for illegal substances.' ID 52

Others felt that testing should not take place – some felt this would be an invasion of privacy, or that, assuming the drugs were safe, available to all and permitted, there would be no reason to test for them as the performance of the individual was the important thing.

8 people felt that cognition enhancers should not be allowed at all, or only for medical purposes.

'Just like testing people for illegal drugs now, it is an invasion of their privacy and against their human rights.
If someone doesn't perform to the job's standards they should be dealt with for that fact, whether they use a drug or not should not matter, and using a test result to get an employee to stop taking or start taking a drug is discriminatory and in violation of their freedom to choose what they do with their body and mind.' ID 264

Group	Number of responses in group
Yes	12
Cognitive enhancers should not be allowed	8
No - invasion of privacy	8
Yes - for health and safety monitoring	6
Yes - to discourage use	5
Not if their use is permitted	5
No - its performance that matters	5
Yes - to maintain fairness	3
No - would lead to discrimination	3
They should only be used for medical reasons	2
No	2
Not without the individuals permission	2
People should be open about using them	2
Not employers	2
Yes - parents only	1
Yes - in schools	1
Microchips rather than drugs would be ok	1
Don't know	1

Question 19. Cognition enhancers can also treat diseases associated with ageing, like Alzheimer's Disease. If there are more older people in society who are mentally alert, what might be the issues of balancing mental well-being with the physical effects of ageing?

51 people answered this question. 19 people felt that if drugs could be developed that helped people with dementia that could only be a good thing. Some believe that the potential effects of having more older people who are mentally alert could be an increase in the number of older people who are able to be independent, and perhaps continue working longer than they would have without drugs. This was seen to be good for individual and for society as a whole (reducing costs of care and contributing to economic success).

'There is no reason why the physical effects should not be reduced as well. But even if someone is bedridden, it certainly helps if they are able to enjoy cognitive pursuits, like TV, reading, and can have a sensible discussion with their carer. Having cared for a parent with multi-infarct dementia I fell there is absolutely no question that the treatment of dementia would be a 100% plus with no downside.' ID 27

However some saw a more negative picture in which some people may be mentally alert but their physical health could be deteriorating, and some participants felt that this could be frustrating and lead to a poor quality of life for those individuals. Even so, most of these respondents felt that this would not be severe enough to prevent the use of cognition enhancers. Some suggested that people should be able to stop taking them if they were unhappy, or that investment in improving physical health of older people should keep pace with the development of cognition enhances to prevent such a situation from arising.

'There's a huge difference between using a drug to treat an ailment and for routine performance enhancement. Mental alertness in older people probably improves the quality of their lives, though not necessarily. I can think of instances where an older person complained that her body wouldn't let her die, even though she was tired of life and the discomforts of old age. So perhaps the medical profession should stop thinking that it is omnipotent and omniscient, and start to respect the desires, wishes and needs of their patients.' ID 123

Some people reiterated their view that cognition enhancers should not be developed, some questioned whether they would be effective and others felt that if they were developed, they should only be available for the most severe cases. A small number felt that research should be focused on understanding and if possible preventing the mental deterioration associated with ageing rather than trying to treat it with drugs.

'There you go again! 'Treatment' of diseases is a bad thing: they should be cured, and the likelihood with Alzheimer's is that it is an environmental/lifestyle disease, that will decline when more is known. Looking for 'treatments' squanders research resources that should go into finding the true cause and its cure! Sound body and sound mind go together so anything which will improve either will be good for both.' ID 113

Group	**Number of responses in group**
Drugs for dementia should be widely used	19
Could result in frustration/poor quality of life	7
There will be economic consequences	6
Don't know	5
Find the causes of dementia/ageing	4
People will maintain independence	4
People /society will adapt	4
Individuals should have a choice	3
Cognition enhancers should not be allowed	3
Question the efficacy of the drugs	3
Advances in physical health should keep up	3
Should only be used for severe mental	1

disability

Question 20. At the moment, we tend to think of drugs as something that we take to treat health problems. Do you think that it is acceptable to take drugs for lifestyle reasons for example, for clubbers to stay awake? Why/why not?

54 people answered this question. There is a fairly even split between those who think lifestyle use is acceptable and those who do not. Those who felt it was acceptable said it was an individual's right to choose whether they use drugs and what they use them for. Some added caveats, saying that they were accepted provided the user understands the risks, or if the drug is mild or has no side-effects. Two thought that lifestyle use was fine provided the drug is legal and safe.

'We drink coffee to keep us alert, smoke tobacco to calm us down and drink alcohol to break the ice. So of course its acceptable to take drugs for lifestyle reasons.' ID 230

Those who felt lifestyle use was not acceptable felt that it was not natural and they would prefer people to find alternative ways of enhancing their life e.g. diet, exercise. Often participants were concerned about the health risks of allowing people to use drugs for lifestyle purposes, such as addiction, the risk from mixing drugs e.g. with alcohol, and the long term the effects of sleep deprivation. One person was particularly concerned about the potential for such drugs to lead to criminal activity, violence or anti-social behaviour.

'Generally I think it is better for us to take as few drugs as possible and to find ways to enhance all aspects of our lives through diet, exercise etc, rather than a chemical dependence. There are already performance enhancing drugs which are, rightly in my opinion, banned in most competitive sports. I would not want to see chemical drugs readily used for 'lifestyle' purposes e.g. for clubbers - we need to maintain the right balances in our lives for example between sleep and activity, work and relaxation and to achieve this in ways which are as 'natural' as possible, have as few side effects as possible. We all need to recognise and accept out own abilities and limitations and not keep pushing ourselves to be better than others, achieve more and more, attain more and more at the expense of that healthy balance in our lives.' ID 11

Group	Number of responses in group
General comments about drugs / limits	11
Yes	8
No - health risks	7
No	6
Yes – individual choice	6
Yes - if they understand risks	6
Comments about question	3
No - not natural	3
Yes - if legal and safe	2
Yes - if no side effects	2
No - leads to crime / violence	1

Yes - depends on the strength 1

Section 5. Drugs and Young People

Question 21. What should be done to prevent young people from misusing drugs?

58 people answered this question. Over half of respondents supported the idea of better education programmes for young people. Many stressed that these should include honest, balanced information about the 'benefits' and risks of drugs as well as how to use them more safely. Some suggested including real-life examples or the presence of ex-users to make the information seem more real. Among this group of participants some were doubtful about the ability of education programmes to totally prevent drug misuse amongst young people, as the need to rebel or experiment was seen to be a natural part of growing up. A small number of others challenged the need to prevent young people from using all drugs, or the need the cure people of mental health problems.

'They should be effectively and TRUTHFULLY educated about the effects of drugs and the dangers of drug misuse. This would consist of educating them that some use of drugs isn't necessarily a problem, only misuse/overuse. Furthermore it would consist of not lying to people, drug education is currently quite ineffective because it says things like 'just one ecstasy tablet can kill' which is barely true and which people will realise isn't true as soon as their mate Steve's mate Dave takes one and doesn't die, from that point on they won't trust anything they were told, even the true bits.' ID 313

13 participants talked about the need for support from parents and the wider community, this could take the form of providing positive role models, teaching personal responsibility, reducing inequality, tackling gangs and providing a creative and loving environment.

Giving young people a decent life with enough love and care. Enabling everyone to attain a decent life…..' ID 185

10 people felt that drugs should be legalised and regulated (particularly drugs that are seen to be less harmful e.g. cannabis) and that this would mean that drugs were safer and their use could be controlled. Some felt that adults would be seen as hypocritical if they tried to ban young people from using drugs when they themselves use alcohol or are addicted to smoking.

'Legalise and regulate them for adults only, in the alcohol and tobacco model. Redeploy resources from attempting to stop everybody taking previously illegal drugs into policing pubs/coffee shops/drug stores or whatever the outlets would be called. Retailers would be encouraged only to supply adults by losing their trading license (and thus income) for supplying young people.' ID 247

A small number of participants suggested that testing for a genetic pre-disposition to addiction could help to target preventative measures where they are most needed.

Group	Number of responses in group
Education programmes	35
Community and parental support	13
Legalise and regulate	10
Testing tendency to addiction	4
Challenge need to cure	3
Crack down on drug trade	3
Punishment for use and possession	2
As much as possible	1
Teach personal responsibility	1
Distinguish between more addictive drugs	1

Question 22. What are some of the things we should do to help prevent vulnerable young people who have been identified as being at particular risk from becoming addicted to drugs?

51 people answered this question. Again many people felt that honest education about the possible risks and ways to avoid them would be the best approach. Some felt that additional life-skills education that teaches young people how to cope with stress / their emotions should be made available. Others suggested educating the parents as well, perhaps through parenting classes. Several people suggested providing emotional, or other forms of support, such as mentors, to young people and their families. Others talked about tackling whatever has made them 'vulnerable' – social inequality, quality of life or their surrounding environment rather than focusing only on drugs. Some felt that providing young people with real opportunities for work or education that give them a purpose in life would be important.

'Those so identified might receive special, targeted prevention and education programmes which would explain the nature of the risk and the likely outcome should they start using. If they are identified on the basis of prior family history of addiction engaging the rest of the family in treatment services, where needed, would be important. General Life skills education on dealing constructively with emotions, conflict and problem solving would also help.' ID 102

'Help them to connect - find ways of helping them find a purpose in life - respect them - love them...' ID 8

A small number of participants felt that it would be best to let young people find out about drug use for themselves, whilst keeping an eye on them and stepping in if needed.

Group	Number of responses in group
Education	20
Other	9
Support	6
Mentors	5
Real opportunities	4

Social & family involvement	3
Let them find out for themselves	3
Counselling	3
Improved quality of life	3
Emotional support	3
Secure environment	2
Tell them they are at risk	2
Stop glamorising drugs	2
Nothing	1
Expert advice	1

Question 23. What do you think might be the impact on a child or their family of being identified as having a possible future addiction to alcohol or other drugs?

47 people answered this question. Most of the potential impacts participants identified were negative from the child's point for view. For example the risk of them being stigmatised, or causing them to stop taking responsibility for their behaviour or the family to see them as a lost cause. Some felt that it would also impact negatively on the family, causing stress and worry, perhaps leading to over-protectiveness.

'As a parent, it would worry me. I have a 17 year old daughter who could well have inherited that gene as her father displays addictive tendencies. However, I would rather not subject her to any addiction test. The addictive personality tends to protect itself anyway and it could be very difficult to secure their agreement to any test. The results of that test, should addictive tendencies be identified, would have to be presented to the person concerned earlier than teen years and whilst it might deter some, it might make others think 'oh well, it's in my genes...' and resign themselves to the fact and accept it and become addicted anyway. I feel that there is limited benefit from being aware of such information. The information already exists in a measure of common sense, i.e. if your parents/grandparents exhibit addictive tendencies, there is a chance that you may also be vulnerable and therefore you choose, or otherwise, to protect yourself.' ID 172

On the positive side, a small number of participants felt that it would be better for the child and their family to know, so that any preventative measures could be put in place, or at least they would be more likely to look for warning signs, and some felt that at least in some cases it would mean that the child would make more effort to avoid drugs.

'I think it would have a polarising effect, some young people would just revel in their fate and head into it with gusto, where as others would make a strong choice to avoid anything which could trigger the addiction. Obviously it would concern the parents, and much like every set of parents I would assume they would do all they could to keep their kid away from drugs. But this is can be a largely futile effort if the child is determined. I think too much State 'help' would make the child feel picked on and isolated which is likely to backfire.' ID 21

Group	**Number of responses in group**
Other	11

Stigma / negative labelling	9
Negative	7
May ensure they avoid drugs	5
Worry for parents	5
Depends on family and child	5
Better to know	4
Resignation to fact that they will take drugs	4
Overprotection of child	4
Don't know	2
Upsetting	2
Big impact	1

Question 24. What would parents need to know in order to make decisions if their child is found to be vulnerable to addiction in the future?

40 people answered this question. Some felt that being aware that there was a risk, and how serious it was, and what the possible types of addiction were, would be important on its own.

'Bearing in mind that any such finding would only indicate a tendency or susceptibility rather than a definite likelihood, that is precisely what they should be told. No more, no less.' ID 123

Others felt that parents should know about the possible signs of addiction to look out for, and where to go for help/ resources if they are needed. Ways of preventing addiction, appropriate parenting, instilling values and behaviour and education all came up several times.

'The most important thing they would need to know is what resources are available to help. There is no point in labelling someone with a possible condition unnecessarily if nothing can be done to improve it or prevent it happening.' ID 186

'They'd need to know what can be done to avoid their child becoming addicted, what signs and symptoms5 to look out for, that the child may need therapy to develop better coping mechanisms for dealing with stressors etc. ' ID 18

Some cautioned against picking out vulnerable children as they felt that everyone is potentially vulnerable.

'All children are vulnerable to drugs and addiction, whether genetically predisposed or not. Parents need to know their children, their friends and interests regardless. 'ID 32

Group	**Number of responses in group**
What help/resources are available	12
Other	8

That their child is vulnerable	3
What to look out for	3
How to help child avoid addiction	3
The possible addictions	2
Whether they have already experimented	2
Parents need to know their child	2
How to care for their child	2
Drug education	2
How great/serious the risk is	2
Honesty	1
Take responsibility for child	1
Trust their child	1
Need to be aware of the risk	1
How to instil values and behaviour	1

Question 25. What sources of information about the benefits and harms of recreational and mental health drugs do you see as trustworthy and why?

48 people answered this question. Personal experiences of drug use or information from those with direct experience of working with drug users, such as street workers, charities, support groups and drug rehabilitation units were seen as trusted sources of information. Anyone with a vested interest such as doctors and drugs companies were seen to be less trusted. However, some sources were both trusted and mistrusted by different participants for example the government or pharmaceutical companies. Scientists and medical practitioners were trusted by a number of participants. However, people or organisations 'giving the official line' were perceived as reluctant to discuss the positive benefits or the attraction of drugs and to focus only on the problems they cause, which some felt was disingenuous. Occasionally the media, e.g. TV or newspapers were mentioned, and participants felt they were glamorising celebrity drug use.

A small number of participants said that there were few or no reliable sources of unbiased information, and for some the assessment of information from a variety of different sources was the only way of forming an accurate picture.

'There are almost always two (or more) points of view on any subject, and an 'expert' can usually be produced to vouch for either opinion, so only a large body of specialists who have all the information available can come up with some consensus on the rights and wrongs of any one issue. I would like to think a government-run body would be best, but at present I have little faith in any such organization managing an un-biased, and un-spun opinion on anything. ' ID 52

!I think very few sources of information are trustworthy. Newspapers and drug companies obviously have their axes to grind. GPs may be influenced by 'meeting targets'. I have been told there are targets for the numbers of patients treated with blood pressure reducing drugs and statins. Governments of all political persuasions have shown themselves untrustworthy on occasions. I would go for peer reviewed research published in reputable

journals and, even with that, I would be looking at the authors and the institutions they represent with a critical eye' ID 185

Group	Number of responses in group
Personal experience / observation	9
Scientific / medical studies	9
Not government	9
Medical practitioners / experts	7
Independent websites	6
Not organisations with a vested interest	6
Official government guidance	4
Use as many sources as possible	4
Schools	3
Leaflets supplied with medications	2
Not pharmaceutical companies	2
Street workers	2
Few sources are reliable	2
Phone advice / help lines	2
Some charities	2
Scientific groups	2
Support groups	2
Not newspapers	2
None	2
Drug rehabilitation units	1
Not enough information	1
Pharmaceutical companies	1

The online consultation - Statistics

Initial email invitations were sent to 162 contacts identified by the project team and AMS, including key organizations dealing with drugs, addiction and mental health. These were supplemented by email invitations to 809 addresses from the 'Public Service Exchange' database which includes people from Local Government, NHS, Housing, Higher Education, Regional Government, Central Government, and Criminal Justice.

The consultation was also highlighted on the blog, through postings on discussion lists, and at a launch event at the Dana centre with associated media coverage.

The online consultation ran from 31st January to 2nd April 2007.

Invitees were asked to register online in order to participate. They were required to provide their name and email address and asked to provide their post code, organisation name, age group, ethnicity and disability status for monitoring purposes.

The online consultation was divided into 5 sections which mirrored those covered at the face to face meetings. These were; Drugs and Society, Drugs and the law, Drugs and

Mental Health, Drugs for a Smarter Brain, Drugs and Young People. Participants were instructed that they could chose to begin at any sections and that they need only answer the questions of most interest to them.

Each Section began with a few paragraphs describing a possible future scenario and a link to a downloadable .pdf document giving more detailed background information. Beneath this paragraph were a series of 4-6 questions relating to the section, with space for participants to type their answers. The answers were limited to 1000 character or approximately 200 words.

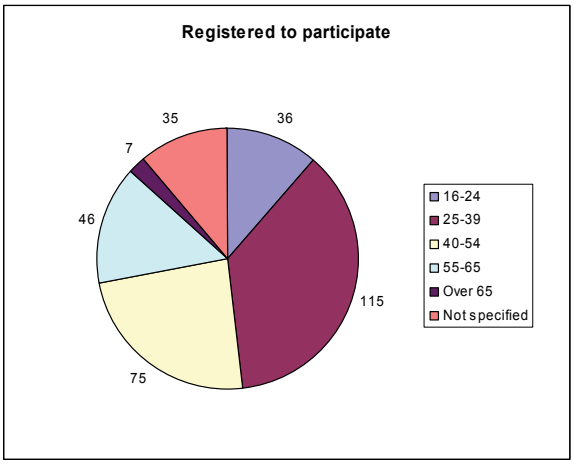
Participation

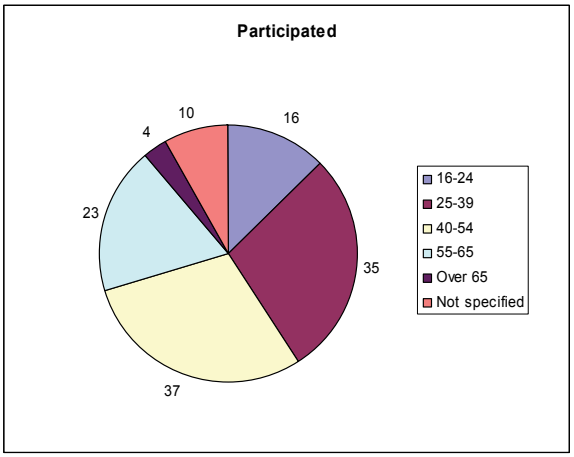
314 people registered on the website. 125 people participated in the online consultation by answering one or more questions. A total of 1659 responses to questions were submitted. A list of participants can be found in the appendix. A breakdown of the demographics of those who registered to participate and those who participated follows.

Demographics of participants

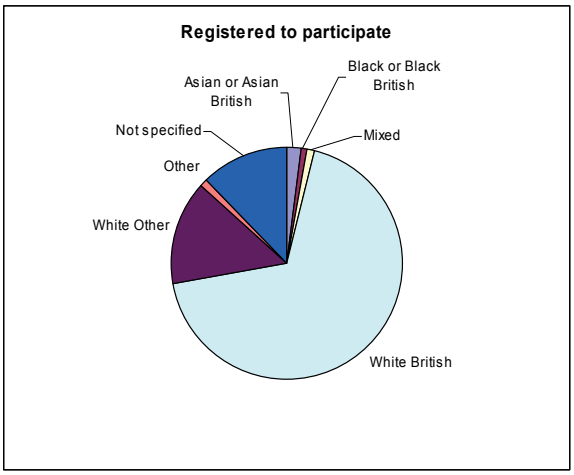
	Registered	Participated
Age		
16-24	36	16
25-39	115	35
40-54	75	37
55-65	46	23
Over 65	7	4
Not specified	35	10
Ethnicity		
Asian or Asian British	6	2
Black or Black British	3	2
Mixed	3	0
White British	215	87
White Other	45	19
Other	4	3
Not specified	38	12
Registered Disabled		
Yes	15	9
No	270	110
Not Specified	29	6

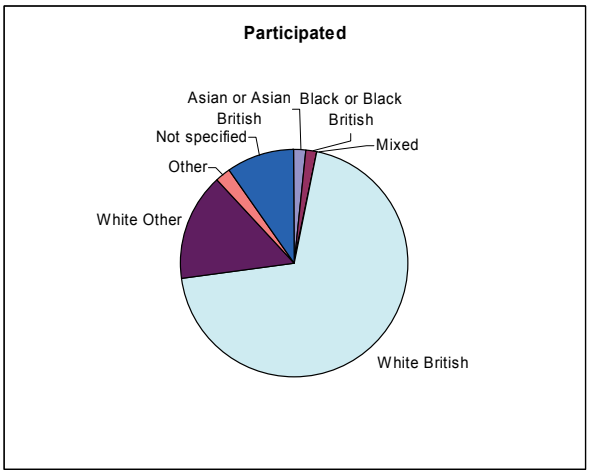
Age





Ethnicity





Registered disabled