

INTRODUCTION AND STRATEGIC CHALLENGES

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Dr Andrew Jackson spoke about the background to the Foresight project, which is run by Sir David King, the UK chief scientific advisor to government. He said that the aim of Foresight is to use scientific evidence to create challenging visions of the future that assist in forming effective strategies now. Foresight is science-based, and its conclusions are influential in government, business and the scientific community.

HOW WILL WE MANAGE DRUGS IN THE FUTURE?

For the Brain Sciences, Drugs and Addiction project, the question asked was how can we manage the use of psychoactive substances in the future to the best advantage of the individual, community and society? Jackson explained that the project's intellectual core was 15 State of Science Reviews, written by leading experts in every relevant field from genomics to history. These fed the 'horizon scan' written by the project's lead scientists to identify the evidence that would most impact on management of psychoactive substances in the future. The scenarios workshops were used to develop the possible futures which the project described, and to model the social impact of different psychoactive substances and related technologies. A series of discussion fora were then held with members of the public to gauge the reaction to various types of psychoactive substances and related technologies.

An overview of the project has now been published as *Drugs Futures 2025?*, which sought to outline the strategic choices that governments face and need to take decisions on. Understanding of the brain from a neuroscience perspective suggests that people will take psychoactive substances as long as chemicals exist that deliver either a relief from anxiety and stress, or that deliver pleasure or reward. So Jackson noted that any policy that assumes that we will stop taking recreational psychoactive substances is a strange policy indeed.

THE FUTURE OF DRUGS AND DRUG USE

In the future, Jackson suggested that traditional psychoactive substances such as heroin would still be available. However, new developments would likely include the emergence of drugs that might have fewer side-effects or offer a more personalised experience than those in use today. Personal drug use might therefore become more sophisticated, including the use of new combinations of drugs, such as stimulants combined with sedatives. Such combinations could increase known harms and have other unintended effects, but might also mitigate harms and be useful for treatment of harmful drug use. New drugs, including cognition enhancers, could also become useful for tackling addictions, most likely in combination with psychotherapies.

Jackson highlighted the fact that the current regulatory classification of drugs does not match with scientific understanding of the harms of such substances to the individual and society. He then pointed out that the way in which psychoactive substances are regulated in the future would depend on the aim of regulation, such as improving health, reducing crime or economic aims.

Other key issues Jackson highlighted were:

- Possible new treatments, including therapies and vaccines to remove the rewards from drug use, and the correct time to intervene.
- The emergence of cognition enhancers, and other drugs to enhance performance and other aspects of behaviour, such as confidence.
- A new awareness of the vulnerability to drugs of young and adolescent brains.
- The importance of surveillance and early responses to new drugs to reduce harms, and an understanding of the cultural context of changes in drug use, including whether social changes could reduce drug use.
- The roles of the pharmaceutical industry and government in developing new addiction treatments.
- The impact of genetic knowledge in shaping future drug use.
- The future role of drug testing.
- The rights of individuals surrounding drug use.

He concluded that the project's findings have been presented to audiences including four government ministers, and that the government has asked the Academy of Medical Sciences to follow up the project with a national review, including a public-engagement strategy.

KEY POINTS

The recreational use of psychoactive drugs is unlikely to go away, but addictions may become better managed through the use of genetic knowledge, vaccines, and new drugs and therapies.

In the future personal drug use is likely to be more sophisticated and will make use of drug combinations and new drugs.

The current regulatory system is inconsistent with the scientific understanding of the harms of drug use.