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EXPERT COMMITTEE ON ETHICAL ISSUES AND PROFESSIONAL STANDARDS

COMITE D'EXPERTS SUR LES QUESTIONS ETHIQUES ET DEONTOLOGIQUES

Cavtat, Croatia, 1-2 October 2008

Conclusions of the Round Table on "Research and its implications for methods of dealings with drug addiction:

the ethical challenges"

Conclusions de la Table Ronde sur « les enjeux de la recherche et de ses implications dans les modes de prise en charge de la toxicomanie »

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PROGRAMME

1) Introduction and objectives

Patrick Sansoy, Coordinator of the Expert Committee on Ethical Issues and Professional Standards

- 2) Presentations
- State of research in neuroscience, psychology and sociology in relation to drug addiction Presentation by **Professor Vanessa Houades. Collège de France. Paris**
- II) Ethical issues raised by current research on drug addiction
 Presentation by **Professor Tom Walker**, **University of Keele**, **United Kingdom**
- III) Contributions from the Pompidou Group's prevention, treatment, research and criminal justice platforms
- A) Use of research for targeted prevention

Universal v. specific prevention: anti-cocaine "vaccines", genetic and psychological research into predisposition and heredity, identification of vulnerable groups through screening.... Is preventive action geared to the psychological, social or genetic profiles of an individual or a group more efficient? Does it entail a risk of stigmatisation, or even discrimination? Presentation by **Professor Alfred Springer**, **Representative of the prevention platform**

- B) Use of new research tools when dealing with drug addicts Individual v. technology: Better understanding of the mechanisms of dependency, highlighting of genetic and psychological factors of predisposition and heredity, new techniques (imaging and recording), study of expectation and reward circuits: current research may ultimately lead to diversified forms of treatment. Will these make it possible to provide a dependent individual with better treatment (personalised medicine), or might they dehumanise the process? Presentation by Gabrielle Welle-Strand, Norwegian Directorate of Health, Representative of the treatment platform
- C) Is research put to good use, or not, by politicians:

 Link between research and politics: Research depends on private and public financing, and its results may or may not be taken into account in the drafting of public policies. To what extent is research used, or even instrumentalised, by politicians?

 Presentation by Dike van de Mheen, Addiction Research Institute, Rotterdam,

 Representative of the research platform
- D) Use of research in order to understand relapses and in the fight against reoffending:

 Contribution of research to the fight against reoffending: Certain drug-takers become dependent, while others do not; some continue to take drugs despite the onset of harmful effects, yet others take drugs again in spite of the treatment provided: social, psychological and neuroscientific research will ultimately cast new light on the individual mechanisms of dependency and the predisposition factors. How will this knowledge make possible a better understanding of relapse and reoffending, and what impact will they have on the drafting and application of legislation governing reoffending and on quasi-coerced treatment?

 Presentation by Lidja Vugrinec, Office for Combating Narcotic Drug Abuse, Coordinator of the criminal justice platform
- IV) Contribution by the EMCDDA "Neurosciences and addiction", an EMCDDA publication Presentation by Margareta Nilson, EMCDDA
- 3) Questions and Discussion
- 4) Conclusions

PROGRAMME

- Introduction et objectifs de la Table Ronde
 Patrick Sansoy, Coordinateur de la plateforme des questions éthiques et déontologiques
- 2) Présentations
- I) Etat des lieux de la recherche en neurosciences, en psychologie et en sociologie sur l'addiction aux drogues

Présentation : Professeur Vanessa Houades, Collège de France, Paris

- II) Questions éthiques soulevées par la recherche actuelle sur la toxicomanie Présentation : **Professeur Tom Walker**, **Université de Keele**, **Royaume Uni**
- III) Contributions des plateformes prévention, traitement, recherche et justice pénale du Groupe Pompidou
- E) Utilisation de la recherche à des fins de prévention ciblée **Prévention générale vs prévention spécifique**: « vaccins » contre la cocaïne, recherche génétique et psychologique sur la prédisposition, sur l'hérédité, identification de groupes vulnérables par le dépistage,...: une prévention adaptée aux profils psychologiques, sociaux ou génétiques d'un individu ou d'un groupe est -elle synonyme d'efficacité accrue ou comporte t-elle un risque de stigmatisation voire de discrimination? Présentation: **Professeur Alfred Springer**, **Représentant de la plateforme prévention**
- F) Utilisation des nouveux outils de la recherche dans la prise en charge des toxicomanes Individu vs technologie: Meilleure compréhension des mécanismes de la dépendance, mise en lumière de facteurs génétiques et psychologiques de prédisposition et d'hérédité, nouvelles techniques (imagerie et enregistrements), étude des circuits de l'attente et de la récompense, les recherches actuelles pourront à terme induire des formes diversifiées de traitement. Cellles ci permettront-elles de mieux soigner un individu dépendant (médecine personnalisée) ou risquent t-elles de déshumaniser la prise en charge?

 Présentation: Gabrielle Welle-Strand, Direction de la santé de Norvège, Représentante de la plateforme traitement
- G) Bonne et mauvaise utilisation de la recherche par les politiques :

Lien entre recherche et politique : La recherche est dépendante des financements privés et publics et ses résultats sont ou non pris en compte dans l'élaboration des politiques publiques. Dans quelle mesure la recherche est-elle utilisée voire instrumentalisée par les politiques ?

Présentation : Dike van de Mheen, Institut de recherche sur la toxicomanie, Rotterdam, Représentante de la plateforme recherche

H) Utilisation de la recherche dans la compréhension de la rechute et la lutte contre la récidive : Apport de la recherche à la lutte contre la récidive : Certaines personnes qui consomment une drogue deviennent dépendantes, d'autres non, certaines poursuivent leur consommation malgré l'apparition d'effets nocifs, d'autres encore réitèrent malgré les soins prodigués : La recherche sociale, psychologique et neuroscientifique apportera à terme un éclairage nouveau sur les mécanismes individuels de la dépendance et les facteurs de prédisposition. En quoi ces connaissances permettront-elles de mieux comprendre la rechute et la récidive et quel impact auront-elles sur l'élaboration et l'application des législations sur la récidive et les traitements quasi-forcés ?

Présentation : Lidja Vugrinec, Bureau de lutte contre l'abus de stupéfiants, Croatie, Coordinateur de la plateforme justice pénale

- IV) Contribution de l'OEDT « **Neurosciences et addiction** » publication de l'OEDT Présentation : **Margareta Nilson, OEDT**
- 3) Questions et Débat
- 4) Conclusions

Conclusions

Summary of the presentation by Vanessa Houades, researcher, Collège de France, Paris, France

Epigenetic research shows that several genes are involved in the dependency circuit. Research into the dopamine circuits alone has not led anywhere yet. It is found that not all individuals who use drugs necessarily become dependent on them. There are therefore risk factors for vulnerability to drug addiction, which may be linked to the product itself or to the individual, whether these factors are inborn (genetic, psychological, etc) or acquired (history, family background, etc). Accordingly, research in neurobiology is increasingly opening up to other disciplines, and the interaction between them is coming to be recognised, even though neurobiological research continues to play a very important part.

Public policy choices and the means used to fund current research sometimes cause promising therapeutic avenues to be abandoned in favour of others that are more attractive to the authorities and the media, such as "vaccinations" against cocaine or other psychotropic substances. (See appended text)

Summary of the presentation by Professor Tom Walker, University of Keele, United Kingdom

Work on drug addiction raises ethical issues which vary considerably according to the type of research. While they are similar to some extent to those arising in connection with research in other fields, some are specific and particularly complex, precisely because they concern drug addiction. There are two main types of ethical issues. Firstly, there are those relating to the participation of drug addicts in research, in particular their competence to consent, the risks and possible benefits of their agreeing to take part, and potential conflicts between researchers' duty towards the participants and their duty to society. Secondly, there are issues connected with the objectives of research and the findings to which it may lead, in particular research into methods of altering the preferences of individuals and the effects of research designed to reduce the likelihood of an individual becoming addicted. (See appended text)

The debates that followed the two experts' presentations and those of the representatives of the prevention, treatment, research and criminal justice platforms (see appended PowerPoint presentations) made it possible to identify several categories of problems that would seem to deserve more detailed study by the ethical issues and professional standards platform, but also by the Group's other platforms:

1) Participation of drug addict populations in research projects

Experiments on human beings are governed by a set of principles and codes. Free, informed consent is required but can be difficult to obtain from drug addict populations because:

- a) they take drugs, which can alter their judgment and ability to understand what is involved;
- b) withdrawal symptoms can undermine their ability to take decisions or prompt them to agree in order to obtain drugs;
- c) their drug addiction can induce irrational or unbalanced behaviour.

The risks and benefits for addicts who take part in research need to be assessed very carefully.

2) Interference, on the basis of research findings, with the preferences and behaviour of individuals

The major ethical issue concerns individuals' autonomy and physical and psychological inviolability (reference to international human rights instruments):

- a) Who should be "vaccinated", when and in what circumstances?
- b) Risk of opening the door to abuse or ethically more problematical initiatives
- c) The fact that a particular type of society is being opted for
- d) Focusing on a particular product or type of behaviour is likely to cause a shift to another product or type of behaviour. For instance, a user who is "vaccinated" might turn from cocaine to other drugs.
- e) Problems posed by the prospective "vaccinations" against cocaine or other psychoactive substances when they are presented as a solution in terms of prevention or targeted treatment.
- f) Risk of providing the authorities and public opinion with a "ready-made" solution to an infinitely more complex problem.
- g) Problem of the benefit in relation to the risks and consequences, particularly for young adolescents (intervention in the central nervous system, which is known to carry risks)

3) Funding and channelling of research

Funding or channelling research on the basis of a chosen approach to the issue or a passing fad on the part of the political authorities and public opinion is likely to undermine its effectiveness.

In order to obtain funding, researchers may be tempted to exploit politicians by painting a glowing picture of results that will go down well with the public.

Researchers are not trained to communicate their findings and control their impact on the political authorities and the media.

The funding of research by industry does not seem to raise problems specific to drugs, but the same problems as research in general (channelling of research, subjectivity, communication of the results, etc).

4) Reconciling research into treatment with clinical needs

Practitioners lament the lack of data and assessments concerning the effectiveness of treatment. They consider that research into treatment should be geared to the specific needs of patients (according to their age, health, history and requirements).

The freedom of the patient and clinician to devise individually tailored treatment together seems increasingly restricted.

To help ensure that the patient sticks to the treatment, should it be modelled on what the patient imagines it should be or should the form of treatment that clinicians consider most suitable be imposed, at the risk of violating certain fundamental rights?

To what extent can the judicial authorities impose treatment at the risk of infringing the drug addict patient's fundamental freedoms (issues relating to quasi-coerced treatment)?

It is a question of striking a balance between the protection of individual rights and the protection of society.

Conclusions

Résumé de la présentation de Vanessa Houades, chercheur, Collège de France, Paris, France

La recherche épigénétique met en évidence l'intervention de plusieurs gènes dans le circuit de la dépendance. La recherche sur les seuls circuits dopaminiques n'aboutit pas. On constate que tous les individus qui utilisent de la drogue ne deviennent pas nécessairement dépendants. Il existe donc des facteurs de risque de vulnérabilité face à la toxicomanie qui peuvent être liés au produit lui-même ou à l'individu de manière innée (génétique, psychologie...) ou acquise (histoire, contexte familial...). D'où une ouverture de plus en plus grande de la recherche en neurobiologie aux autres disciplines et une reconnaissance de l'interaction entre elles, même si la place accordée à la recherche en neurobiologie reste toujours très importante.

Les orientations des politiques publiques et les modes de financement de la recherche actuelle mènent parfois à l'abandon de pistes thérapeutiques prometteuses au profit d'autres plus séduisantes aux yeux des pouvoirs publics et des médias, tels que les « vaccins » contre la cocaïne ou d'autres substances psychotropes. (voir texte en annexe)

Résumé de la présentation de Tom Walker, Professeur, Université de Keele, Royaume-Uni

Les travaux sur la toxicomanie posent des problèmes éthiques, qui varient considérablement en fonction de la nature des recherches et qui, s'ils rejoignent, dans une certaine mesure ceux que soulèvent les recherches dans d'autres domaines, posent des problèmes éthiques spécifiques particulièrement complexes liés au fait même qu'ils portent sur la toxicomanie. Deux grands types de problèmes éthiques sont ainsi identifiés : d'une part les questions liées à la participation des personnes toxicomanes aux travaux de recherche, notamment la capacité de ces personnes à donner leur consentement, les risques et bénéfices éventuels pour celles qui donnent leur accord, les conflits potentiels entre les obligations du chercheur vis-à-vis des participants et celles vis-à-vis de la société. D'autre part, les problèmes liés aux objectifs de la recherche et aux résultats sur lesquels elles peuvent déboucher et en particulier la recherche sur les méthodes visant à modifier les préférences des individus et les effets des recherches dont le but est de réduire la probabilité qu'un individu devienne toxicomane. (voir texte en annexe)

Les débats qui ont suivis les présentations des deux experts ainsi que celles des représentants des plateformes prévention, traitement, recherche et justice pénale (voir powerpoints en annexes) ont permis d'identifier plusieurs catégories de problèmes qui mériteraient d'être approfondies par la plateforme des questions éthiques et déontologiques mais aussi par les autres plateformes du Groupe:

1) Participation de populations de toxicomanes à des projets de recherche

L'expérimentation humaine est encadrée par un ensemble de principes et de codes. Un consentement libre et éclairé est requis mais pourrait être plus difficile à obtenir avec des populations de toxicomanes en raison de

- d) leur consommation de stupéfiants qui peut altérer leur capacité à juger et à comprendre les enjeux
- e) de l'état de manque qui peut nuire à leur capacité à décider ou les mener à donner leur accord pour obtenir des produits à consommer
- f) de leur toxicomanie qui peut induire des comportements irrationnels ou déséquilibrés.

Les risques et bénéfices pour les toxicomanes qui participent à des recherches doivent être évalués très précisément.

2) Intervention par les résultats de la recherche sur les préférences et les comportements des individus

Le problème éthique majeur est celui de l'autonomie, de l'intégrité physique et psychique (référence aux textes internationaux de protection des droits fondamentaux)

- h) Qui peut-on « vacciner », quand, sous quelles conditions?
- i) Risque de porte ouverte sur dérapage ou initiative éthiquement plus problèmatique
- j) Choix de société
- k) La focalisation sur un produit ou un comportement risque de provoquer un glissement vers un autre produit ou comportement. Ainsi, un usager soumis à un « vaccin » éventuel se détournerait peut-être de la cocaïne mais risquerait de se tourner vers d'autres drogues.
- I) Problèmes posés par les futurs « vaccins » contre la cocaine ou d'autres substances psychoactives quand ils sont présentés comme solution de prévention ou de traitement ciblée.
- m) Risque de fournir aux pouvoirs publics et à l'opinion publique une solution « clé en mains » pour un problème infiniment plus complexe.
- n) Problème du bénéfice face aux risques et conséquences encourus notamment chez des jeunes adolescents (intervention sur le systeme nerveux central avec risques identifiés)

3) Financement et orientation de la recherche

Le financement ou l'orientation de la recherche selon une idéologie ou un intérêt du moment de la part des autorités politiques et de l'opinion publique risque de nuire à son efficacité.

Afin d'obtenir des financements, les chercheurs peuvent être tentés d'instrumentaliser les politiques en leur faisant miroiter des résultats « populaires » dans l'opinion publique

Les chercheurs manquent de formation à communiquer leurs résultats et à gérer leur impact sur les pouvoirs politiques et les médias.

Le financement de la recherche par l'industrie ne semble pas soulever de problemes specifiques dans le domaine des drogues mais les mêmes problèmes que la recherche en général (orientation des recherches, subjectivité, communication des résultats...)

4) Adéquation entre recherches menées en traitement et besoins du terrain clinique

Les acteurs de terrain déplorent l'absence de données et d'évaluation sur l'efficacité des therapeutiques utilisées. Ils estiment que la recherche en traitement devrait être orientée vers les besoins specifiques des patients (selon âge, santé, histoire et besoins)

La liberté pour le patient et le clinicien de construire ensemble un traitement sur mesure semble de plus en plus restreinte.

Pour une meilleure adhésion du patient, le traitement devrait-il être orienté selon ce qu'il imagine que celui-ci devrait être ou faut-il imposer le traitement que les cliniciens estiment le plus adapté au risque d'enfreindre certains droits fondamentaux ?

Dans quelle mesure les pouvoirs judiciaires peuvent-ils imposer des traitements au risque d'enfreindre les libertés fondamentales du patient toxicomane? (questions liees aux traitements quasi-contraints).

Il s'agit de trouver le nécessaire équilibre entre protection des droits de l'individu et protection de la société.

APPENDICES / ANNEXES

STATE OF RESEARCH IN NEUROSCIENCE, PSYCHOLOGY AND SOCIOLOGY IN RELATION TO DRUG ADDICTION

by Vanessa Houades, Researcher, College de France, Paris

According to the definition given in 1981 by the World Health Organization, the dependence is " a syndrome for which the consumption of a product becomes a requirement superior to that of the other behavior which had previously a bigger importance ". We distinguish generally the physical dependence, which corresponds to a reaction of the body to the absence of drug, and the psychic dependence, which concerned the disorders of the humor. We also distinguish the entertaining use, which corresponds to a consumption of psychoactive substances which does not lead to either complications for the health, or behavioural problems having harmful consequences on the others or for itself harmful and nocive use which concerned a consumption susceptible to pinduce physical, emotional, psychological or social damages for the consumer and his close or distant environment. The state of dependence appears gradually, with the repetition rehearsal of the takings. In its extreme shape, it is characterized by a syndrome for which the consumption of a product becomes a requirement superior to that of the other behavior which had previously a bigger importance.

However, all the individuals who use some drug do not become inevitably dependent. It thus exists factors of risk and vulnerability in front of the drug addiction. These factors are diverse. Addictive properties of the drug itself, individual factors in a innate way (genetic, psychological factors) or acquired (the history of the individual, in particular the more or less conflicting situations which he was able to meet during his existence, the social or family factors).

We correlate for a long time the establishment of the dependence to what it was advisable to call the reward system. It is henceforth established that all the products which activate the dependence increase the release of a neurotransmitter, called dopamine, in a precise region of the brain. It is likely that the installation of the dependence is due to the modification by the drug, of the kinetics and the amplitude of this dopamine release. With the repetition of the takings in an identical environment, the release of dopamine increases, and the link which welds the satisfaction felt in the conditions of obtaining of the product strengthens.

It is clear that, even if the dopamine represents a fundamental link in the dependence, it is not alone to intervene. However, all the current therapies to treat the drug addiction targeting the dopaminergic system failed until this day. Indeed, the reward model suggests that any event which activates the dopaminergic system can produce a significant rewarding effect but it does not mean that the dopamine is foolish responsible for the addiction. So, it was recently shown that other monoaminergic systems are involved in the addiction like the noradrenergic and serotonergic systems (Salomon and al., on 2007; Lanteri and al., on 2008).

So, the current therapeutic researches on the drug addiction concentrate mainly on the development of substitute products which are going to help in the weaning but there is even today no treatment of the neurobiological modifications led by the repeated taking of drugs. Furthermore, the orientations of the public policies as well as the kind of financing of the research make that numerous promising therapeutic tracks are abandoned for the benefit of other more attractive with the eyes of the powers public and media but which besides raising

numerous ethical problems, as the vaccine against the cocaine, seem to bring very few profits to the drug addicts.

ETAT DES LIEUX DE LA RECHERCHE EN NEUROSCIENCES, EN PSYCHOLOGIE ET EN SOCIOLOGIE SUR LA TOXICOMANIE

par Vanessa Houades, Chercheur, Collège de France, Paris

Selon la définition donnée en 1981 par l'Organisation mondiale de la santé, la dépendance est «un syndrome pour lequel la consommation d'un produit devient une exigence supérieure à celle d'autres comportements qui avaient auparavant une plus grande importance». On distingue en général la dépendance physique, qui correspond à une réaction de l'organisme à l'absence de produit, de la dépendance psychique, qui a trait aux troubles de l'humeur. Alors que la première disparaît après quelques jours d'abstinence, la seconde peut subsister plusieurs années après l'arrêt de la consommation. On distingue également l'usage récréatif, qui correspond à une consommation de substances psychoactives qui n'entraîne ni complications pour la santé, ni troubles du comportement ayant des conséquences nocives sur les autres ou pour soi-même de l'usage nocif qui a trait à une consommation susceptible de provoquer des dommages physiques, affectifs, psychologiques ou sociaux pour le consommateur et son environnement proche ou lointain. L'état de dépendance apparaît progressivement, avec la répétition des prises. Dans sa forme extrême, il se caractérise par un syndrome pour lequel la consommation d'un produit devient une exigence supérieure à celle d'autres comportements qui avaient auparavant une plus grande importance.

Cependant, tous les individus qui utilisent de la drogue ne deviennent pas nécessairement dépendants. Il existe donc des facteurs de risque et de vulnérabilité face à la toxicomanie. Ces facteurs sont divers. Soit liés au produit lui-même (pouvoir toxicomanogène du produit, statut social...), ou lié à l'individu de manière innée (facteurs génétiques, psychologiques...) ou acquise (l'histoire de l'individu, en particulier des situations plus ou moins conflictuelles qu'il a pu rencontrer au cours de son existence, les facteurs sociaux ou familiaux).

On a longtemps lié l'installation de la dépendance, chez le toxicomane, à ce qu'il est convenu d'appeler le système de récompense. Il est désormais établi que tous les produits qui déclenchent la dépendance chez l'homme augmentent la libération d'un neuromédiateur, la dopamine, dans une zone précise du cerveau. Il est vraisemblable que l'installation de la dépendance soit due à la modification, par la drogue, de la cinétique et de l'amplitude de cette production de dopamine. Avec la répétition des prises dans un environnement identique, la libération de dopamine augmente, et le lien qui soude la satisfaction ressentie aux conditions d'obtention du produit se consolide.

Il est clair que, même si la dopamine représente un maillon fondamental dans la dépendance, elle n'est pas seule à intervenir. Cependant, toutes les thérapies actuelles visant à traiter la toxicomanie en ciblant le système dopaminergique ont jusqu'à ce jour échoué. En effet, le modèle de récompense suggère que tout événement qui active le système dopaminergique peut produire un effet récompensant significatif mais cela ne signifie pas que la dopamine soit responsable de l'addiction. Ainsi, il a été récemment montré que d'autres systèmes monoaminergiques sont impliqués dans l'addiction comme les systèmes noradrénergiques et sérotoninergiques (Salomon et al., 2007; Lanteri et al., 2008).

Ainsi, les recherches thérapeutiques actuelles sur la toxicomanie se concentrent principalement sur le développement de produits de substitution qui vont aider au sevrage mais il n'y a encore aujourd'hui aucun traitement des modifications neurobiologiques induites par la prise répétée de drogues. De plus, les orientations des politiques publiques ainsi que les modes de financement de la recherche font que de nombreuses pistes thérapeutiques prometteuses sont abandonnées au profit d'autres plus séduisantes aux yeux des pouvoirs publiques et des médias mais qui en plus de soulever de nombreux problèmes éthiques, comme le « vaccin » contre la cocaïne, semblent apporter très peu de bénéfices aux toxicomanes.

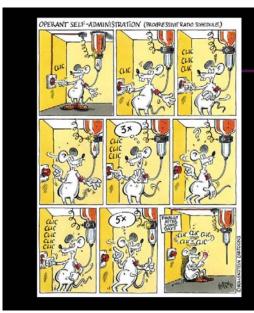
Etat des lieux de la recherche en neurosciences, en psychologie et en sociologie sur la toxicomanie

> Vanessa Houades, Ph.D. Laboratoire de Neuropharmacologie Collège de France

Toxicomanie

La toxicomanie se traduit par un usage répété et excessifd'uneouplusieurs substances psychotropes sans justification thérapeutique.

Addiction: "syndrome pour lequel la consommation d'un produitdevientuneexigencesupérieureàcelled'autrescompor tements qui avaientauparavantune plus grande importance"



Addiction

Classification

drogues licites (alcool, tabac) / drogues illicites (héroïne, cocaïne, cannabis, psycho stimulants).

Une nouvelle classification selon la dangerosité:

Premier groupe: héroïne, opiacés, cocaïne et alcool.

Deuxièmegroupe: psychotropes, (médicamentsanxiolytiques et hypnotiques), hallucinogènes, benzodiazépines et tabac.

Troisièmegroupe: cannabis uniquement.

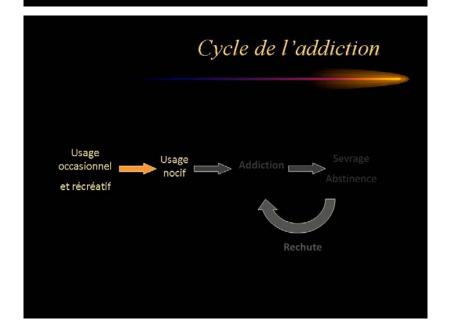
Usage occasionnel et récréatif

Usage nocif

Addiction

Sevrage
Abstinence

Rechute



Usage et usage nocif

Usage: consommation de substances psychoactives qui n'entraîneni complications pour la santé, ni troubles de comportementayant des conséquencesnocivessur les autresou pour soi –même.

Usage nocif (CIM 10) ouabus (DSMIV):consommation susceptible de provoquer des dommages physiques, affectifs, psychologiquesousociaux pour le consommateur et pour son environnementprocheoulointain.

Facteurs de risque et vulnérabilité en toxicomanie

Interaction de troisfacteurs :

2 → Individu

- 3: 4: 5: 6: Produit Environnement 4 3
- ${\it 1:Pharmacologie, prohibition...}$
- 2 : Psychanalyse, psychobiologie...
 - 3 : Sociologie
 - 4 : "Modèles de maladie"...
 - 5: Abordsculturels, historiques...
 - 6 : Intégration, déviance

Facteurs de risque et vulnérabilité en toxicomanie

Interaction de troisfacteurs :

- 2 -> Individu
- 1 : Pharmacologie, prohibition...
 - 2: Psychanalyse, psychobiologie...
 - 3 : Sociologie
 - 4 : "Modèles de maladie"...
 - $5: Abord sculturels, \, historiques...$
 - 6 : Intégration, déviance

Produit

Environnement ← 3

Facteurs de risqueliés aux produits

- ✓ pouvoirtoxicomanogène des produits
- ✓ risqued'apparition de complications sanitaires, psychologiques et sociales
- ✓ statut social du produit

Facteursindividuels de vulnérabilité

Facteursgénétiques/biologiques:

- ✓ existence d'un spectregénétique de vulnérabilité (récepteursà la dopamine, sérotonine,noradrénaline, au GABA...)
- ✓ modulations neurobiologiques et degré de réponse au stress.

Facteursindividuels de vulnerabilite

Facteurspsychologiques/psychiatriques

Comportements:

- ✓instabilité, impulsivité/agressivité, troubles des conduites et interactions sociales
- ✓ troubles affectifs
- ✓ niveauélevé de recherche de sensations, de nouveauté

Co-morbiditépsychiatrique:

- ✓ troubles anxieux
- √ troubles des conduites
- ✓ troubles du sommeil
- ✓ troubles des conduitesalimentaires
- ✓ troubles psychosomatiques

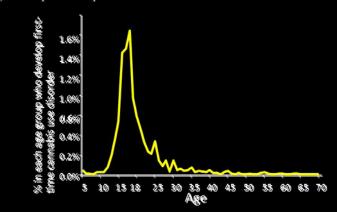
Facteursindividuels de vulnérabilité

Facteursliésàl'environnement

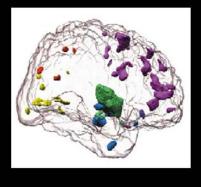
- √ facteurssociaux (exposition précoce aux produits, marginalité)
- ✓ facteursfamiliaux (consommation des produits, dysfonctionnementsfamiliaux)
- ✓ rôle de l'entourage
- √facteurs socio-culturels (immigration, acculturation)

L'adolescenceunepériode de vulnérabilité

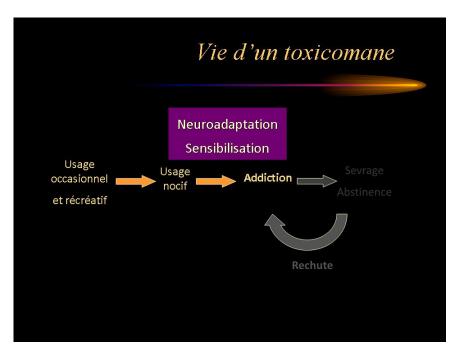
Age de la première prise de cannbis menant a un trouble

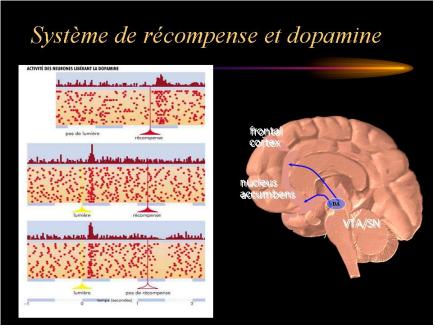


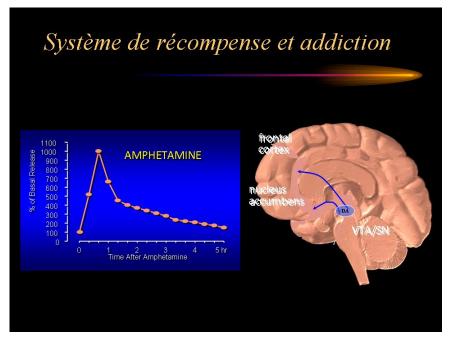
le cervau adolescent: un cerveau en développement

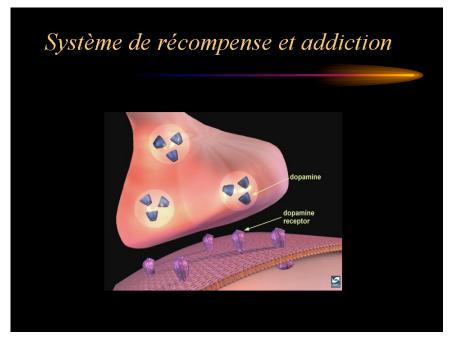


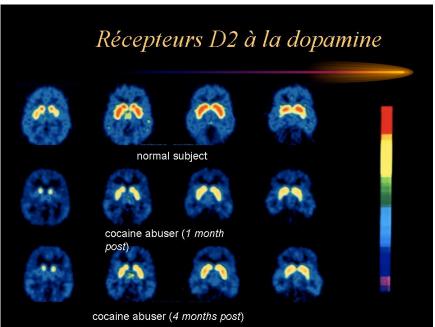
Sowell, E.R. et al., Nature Neuroscience, 2: 859 861, 1999

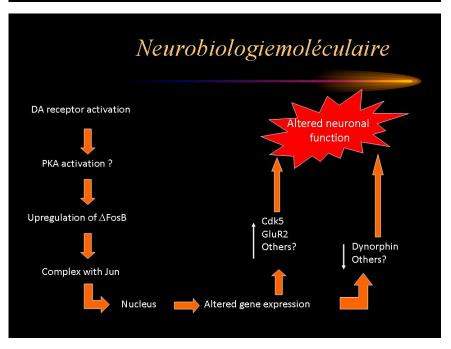












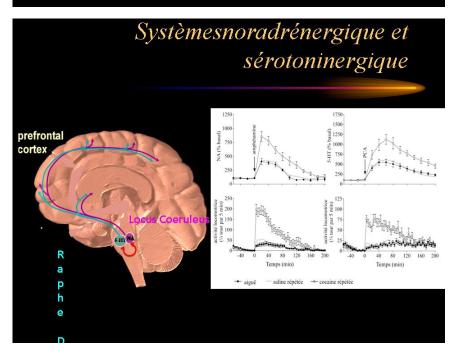
Dopamine et Addiction

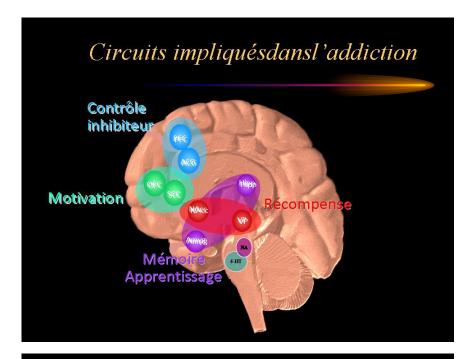
Le modèle de récompensesuggèreque tout événement qui active le systèmedopaminergiquepeutproduire un effetrécompensantsignificatif.

Maiscela ne signifie pas que la dopamine soitresponsable de l'addiction ...



Sensibilisation comportementale





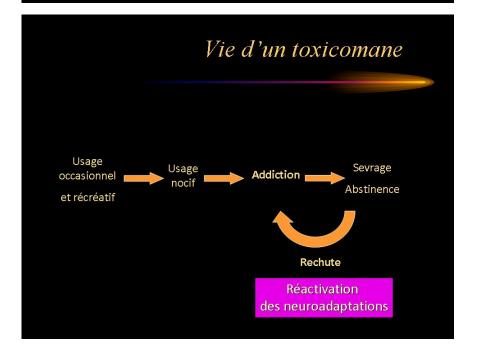
Polyconsommation

La consommation d'un produitentraînesouvent des consommationsassociées.

Usage régulier de plusieursproduits :

tabac + alcool + anxiolytiquesplusieursfois par semaine

Usage de plusieursproduitsà la foisdans un même moment : cannabis + alcool + tabac



Sevrage

Arrêt de manièrebrutaleou progressive de la prised'une substance psychoactive

La privation d'un produitentraîneune sensation de malaise, d'angoissevoireunedépression et parfois des manifestations physiques.

Traitements de substitution

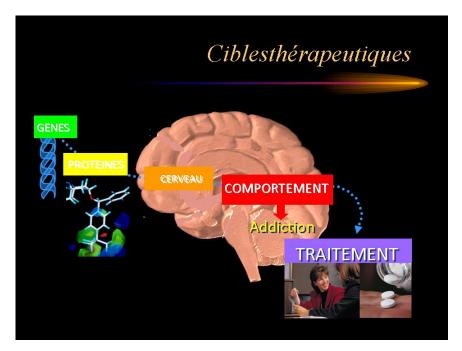
Buprénorphine: Subutex®

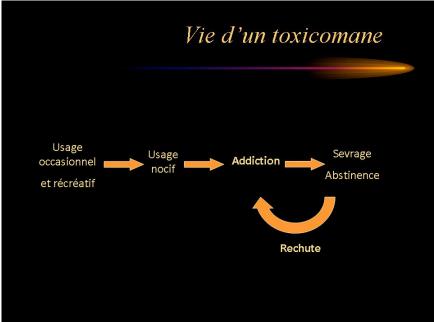
intoxications pouvantêtresévères en casd'association aux benzodiazépines, d'injection IV des comprimés de Subutex®.

Méthadone : demi-vie de 24h. Longue duréed 'action, dosage sang, urines, cheveux.

Suboxone: subutex/naloxone, prévenirl'injection.

La toxicomane: unepathologie du SystèmeNerveux central Control Cocaine Abuser Healthy Heart Diseased Heart





ETHICAL ISSUES RAISED BY CURRENT RESEARCH ON DRUG ADDICTION

by Prof. Tom Walker, Keele University, United Kingdom

Research into drug addiction raises a wide range of ethical issues, although what these are will vary depending on the nature of the research. There is, at least to some extent, an overlap between these issues and those raised by other types of research. Indeed in some cases the ethical concerns involved in a particular research project will stem primarily from features that it shares with other types of research, rather than from the fact that it is research specifically into addiction. For example, using animal models to study the effects of drugs on the brain will raise a set of standard questions about the use of animals in research. These questions are raised by all research using animals and so are not specific to research into drug addiction. On the other hand, there are other cases in which the ethical concerns raised by a particular project will be particularly pressing or challenging if the research is into drug addiction. It is these that I will focus on here.

When looking at the literature of ethical issues raised by current research into drug addiction we can discern two major areas of concern. The first of these comes from the use of drug addicts as participants in research. Here the concerns focus on the ability of addicts to consent to take part in the research, the possible risks or benefits to addicts from doing so, and worries about the possibility of the researcher's obligations to the participants in their research conflicting with their obligations to society. The second major area of concern has focused on the wider issues that might arise in carrying out particular types of research. Here the focus is not on the research process itself so much as on the aims of the research, and what they might lead to. I will consider each of these two main areas in turn.

Ethical issues raised by the use of addicts as participants in research

In order to carry out some types of research into drug addiction it is necessary to make use of drug addicts as research participants. The use of humans in research can be ethically problematic and there are a set of guidelines and codes which cover this (see the Nuremburg code, the Declaration of Helsinki and the Belmont Report). It is, for example, a requirement in all of these guidelines and codes that for research to be ethically acceptable any human participants must have consented to their participation. Furthermore, for this consent to be valid it must be informed, voluntary and the person giving it must have the capacity or competence to do so. These requirements can create particular problems for research into drug addiction which stem from the nature of addiction.

Perhaps the most commonly raised problem in this context has been a worry that drug addicts are unable to give valid consent to participate in research either because they lack the competence to do so, or because their participation is not really voluntary (Charland, 2002 and accompanying commentary; Hall, Carter and Morley, 2003; Foddy and Savulescu, 2006; Levy, 2006; Walker, 2008). It is in the nature of addiction that addicts have strong, perhaps irresistible, desires, have difficulty in sticking to decisions to stop taking drugs, and, when intoxicated or experiencing cravings, have problems in understanding research and making decisions about what to do. All of these features could affect the addict's ability to give valid consent to participate in a research project – although, of course, the extent of this will vary from project to project.

There are a range of positions that one might take on how serious a problem this is. It will be useful to look here at an ongoing debate about the ethical acceptability of research into heroin prescription as a treatment for some addicts to see what these are. At one end of the spectrum there are those who hold that addicts simply cannot consent to participate in this type of research because they are unable to refuse to do so given their craving for the drug (Charland, 2002; Cohen, 2002). At the other, there are those who argue that addicts can give valid consent to take part in this type of research because, although they have strong desires for the drug, they retain the ability to make voluntary choices about what they will do (Foddy and Savulescu, 2006; Levy, 2006). More recently Walker has suggested that the truth lies somewhere between these two positions (Walker, 2008).

To a large extent this uncertainty and disagreement about whether drug addicts can consent to take part in research stems from disagreements about the extent to which addiction compromises our abilities. As such, further research into the nature of addiction may help to resolve this issue. In the meantime, however, there remain serious worries about the use of addicts as research participants for this reason. These worries can be alleviated if steps are taken to help ensure that the consent process maximises the chances that the addict will be giving consent in circumstances where that consent will be both voluntary and competent. This involves paying attention to a range of features, including: the nature of the research, the setting in which consent is obtained, the nature of any incentives to participate, and the complexity of the information that is provided about the research project.

Ideally, careful project design will ensure that addicts will be able to consent to take part in any given research project. However, this may not always be possible. In these circumstances it may still be possible for the research to go ahead. All the guidelines on research involving human subjects allow for some research of this type. But in each case there are additional safeguards that have to be in place. These vary slightly from place to place but generally include a requirement for proxy consent (from a parent or child of the proposed research subject, for example), that the research is of no or minimal risk to the research participant, and that there is some benefit for the research participant (or in some cases the group of those who have the condition – in this case, addicts).

This leads us into the second major ethical issue in using addicts as research participants: the extent to which the research will pose a risk to the addicts and the extent to which it may benefit them. This is a particular concern when it comes to research into drug addiction because there does not appear to be a consensus about what would be best for particular addicts, or what would pose a risk for them. Nor, is it clear who should make this decision.

Things are clearest here where the addict is competent and able to give voluntary consent to take part in a research project. In that case, following our general approach to research, it seems that the decision is best left to him or her (Beauchamp and Childress, 2008). However, this is not the end of the story. We may not think that it is acceptable to expose addicts to certain risks (say the risk of being put in a situation that might promote relapse – see Cohen, 2002), even where they would agree to take the risk themselves. Things are even worse where the addict is not able to give valid consent, or where we are unsure about their ability to do this. Exposing someone to risks without their consent in a research project would appear to be ethically problematic.

The final issue that I want to raise in this section concerns the possibility that a researcher's duties to their research participants may come into conflict with wider duties to society. It is in the nature of research that involves addicts as participants that researchers may come across information about illegal or harmful activities – for example, information about the possession of illegal drugs, information about the supply of illegal drugs, or information about illegal activities (such as theft or prostitution) that addicts may be engaging in to fund their addiction. In such cases an ethical issue arises about what the researcher ought to do with such information. On the one hand, they have a duty of confidentiality towards their research participants, whilst on the other they have responsibilities to act so as to prevent harm to third parties where they can do so.

It is unclear how much of a problem this is in practice when it comes to drug addiction. However, in discussions with members of research ethics committees this is frequently raised as a concern that they have with this type of research. It is thus important that researchers consider what they ought to do in such cases. Comparison with other types of research where similar issues arise suggest that the way forward is likely to be that researchers need to have formulated a plan about what they will do with different types of information that they may discover and, furthermore, must ensure that participants know what this plan is before agreeing to take part in the research.

Ethical issues arising from the nature, or aims, of the research

So far I have been focusing on ethical issues that arise from using addicts as participants in research. I now want to turn to the other major area where ethical concerns arise in research into drug addiction: concerns which centre on the wider impacts of the research. Here I want to concentrate on two issues – research into methods of changing people's preferences, and wider implications of research that may reduce the likelihood of becoming addicted. I will take these in turn.

Some current research into drug addiction investigates ways in which we might change people's future behaviour or preferences. The fundamental ethical issue here will vary depending on whether the treatment would be given to adults or children, and on whether it is given to existing addicts or to those not addicted. Ethical debate on these issues in connection with research into addiction has centred on research into drug vaccinations (for example, cocaine vaccinations) and it is this that I will focus on here (Hall and Carter, 2004; Ashcroft and Franey, 2004; Hayry, 2004).

Whether or not a cocaine vaccination is ethically problematic will depend on how it is used. If it is only prescribed to competent adults who want to use it to prevent relapse from an existing addiction, it does not seem to raise any particularly serious issues. If on the other hand, it was to be prescribed to addicts without their consent (perhaps because they could not give consent), or to children as a way of preventing them becoming addicted, then it would raise ethical concerns. In the former the worry will be about undermining the autonomy, or compromising the authenticity, of the people concerned - something that in general we ought not to do. In the latter, the worry is captured by the idea of a child's right to an open future. What is meant by this is that we ought not to shut down options for children, rather we should leave them with as broad a range of options as possible and let them make their own decisions once they come of age to do so. Steps to affect a child's behaviour concerning drug taking in the future would seem to violate this requirement, and as a result looks problematic (Hayry, 2004). How serious a problem this is depends to some extent on the value of the options that have been removed. Although becoming addicted does not look like a valuable option, preventing this by using a vaccination may adversely affect other areas of a child's live (such as fitting in with their peers).

The ethical issues that arise from research that is aimed at leading to products that have these ethically problematic uses is two-fold. First, if the end product would not be one that we could use in an ethically acceptable way, or the risks of misuse are so great it should not be allowed, then it may be better for the research not to go ahead. Instead research funds and personal would be better used in research that will be usable in future treatment for addicts. For this reason, although products like cocaine vaccinations are not yet available it is useful to consider the ethical issues that they raise at an early stage of research into their viability. Second, there will be concerns about these same ethically problematic features during the testing of any products during the research process which may render that process itself as ethically worrying.

Finally in this section I want to consider briefly the wider impact of research that aims to 'cure' addiction, to alleviate its more serious effects, or to reduce the chances that experimental use will lead to addiction. The worry here is that by making experimentation with drugs safer, there is a likelihood that this will lead to more risk taking behaviour (as has been seen in other contexts). As there are problems created by drug use other than addiction, progress on research into addiction may actually increase the incidence of these problems.

How big a problem this would turn out to be is, of course, an empirical matter. And, as far as I know there is no research on this. However, the possibility of such problems does not mean that research into ways of helping addicts should not go ahead. Rather, I think, what is required is for those planning research, or funding it, to take a broader view and think about the effects of research on drug use as a whole, not simply to focus narrowly on the issue of addiction.

Conclusion

What I have attempted to do here is to give an overview of the main ethical issues that arise when looking at current research into drug addiction, and which are likely to be raised by ethical scrutiny of such research. Clearly there are ethical issues that are raised, and ethical concerns that people may have, about research into drug addiction that are not dealt with here. One example concerns that possible stigmatising effect of research on those who are addicts or who are discovered to have a propensity to become addicts. How big a problem this will be depends on whether this increases the stigma already faced by these groups, and it is unclear whether this will be the case or not. Another example concerns the ways in which research is funded and in which funders can dictate the direction of research. These are serious issues that require attention but about which not much is known concerning their ethical impact. In these cases further discussion and research into the ethical issues is needed.

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PROBLÈMES ÉTHIQUES SOULEVÉS PAR LA RECHERCHE ACTUELLE SUR LA TOXICOMANIE

par Prof. Tom Walker, Université de Keele, Royaume-Uni

Les travaux sur la toxicomanie posent des problèmes éthiques, qui varient considérablement en fonction de la nature des recherches et qui rejoignent, dans une certaine mesure au moins, ceux que soulèvent les recherches dans d'autres domaines. En effet, dans certains cas, les problèmes éthiques soulevés ne sont pas propres à la toxicomanie, mais communs à divers types de recherche. À titre d'exemple, le recours à un modèle animal pour étudier les effets d'une drogue sur le cerveau soulève un ensemble de questions classiques sur l'utilisation des animaux dans la recherche. À l'inverse, d'autres projets posent des problèmes éthiques particulièrement pressants et complexes directement liés au fait même qu'ils portent sur la toxicomanie. On s'attachera essentiellement, dans ce qui suit, à ce second cas de figure.

La littérature sur les questions éthiques posées par la recherche actuelle sur la toxicomanie fait apparaître deux grands types de problèmes. D'une part, ceux liés à la participation de personnes toxicomanes aux travaux de recherche (capacité de ces personnes à donner leur consentement, risques et bénéfices éventuels pour celles qui donnent leur accord, conflits possibles entre les obligations du chercheur vis-à-vis des participants et ses obligations vis-à-vis de la société). D'autre part, les problèmes plus généraux soulevés par les travaux qui s'attachent moins au processus de recherche lui-même qu'aux objectifs et aux résultats sur lesquels ils peuvent déboucher. J'aborderai tour à tour ces deux grands aspects du problème.

Problèmes éthiques soulevés par la participation de toxicomanes aux recherches

Certains types de recherche sur la toxicomanie requièrent la participation de personnes toxicomanes. L'expérimentation humaine, qui peut se révéler problématique sur le plan éthique, est encadrée par un ensemble de principes et de codes (Code de Nuremberg, Déclaration d'Helsinki et Rapport Belmont), qui disposent tous par exemple qu'un travail de recherche n'est acceptable sur le plan éthique que si les sujets ont donné leur consentement pour y participer. En outre, pour que ce consentement soit valable, il doit être libre et éclairé, et la personne qui le donne doit avoir la capacité de le faire. Dans le domaine de la toxicomanie, ces obligations posent parfois des problèmes spécifiques liés à l'objet même des recherches, à savoir la dépendance aux drogues.

Problème peut-être le plus souvent évoqué à cet égard, les toxicomanes ne seraient pas en mesure de donner un consentement valable, au motif qu'ils n'en auraient pas la capacité ou que leur participation ne serait pas vraiment volontaire (Charland, 2002 et observation annexée; Hall, Carter et Morley, 2003; Foddy et Savulescu, 2006; Levy, 2006; Walker, 2008). Du fait de la nature même de ce trouble, les personnes toxicomanes ont des besoins tenaces, voire irrépressibles, elles ont du mal à tenir leur promesse de sevrage et, sous l'effet de la drogue ou en période de manque, elles comprennent difficilement les tenants et les aboutissants des travaux de recherche auxquels elles doivent décider ou non de participer. Tous ces éléments peuvent avoir une incidence, plus ou moins importante évidemment selon le projet, sur la capacité de ces personnes à donner un consentement valable.

Sur la gravité de ce problème, les avis sont partagés. En témoignent les discussions actuelles concernant l'acceptabilité, sur le plan éthique, des recherches sur la prescription d'héroïne pour traiter certaines catégories de toxicomanes. Dans ce domaine, les avis vont d'un extrême à l'autre. Certains soutiennent que les toxicomanes ne peuvent tout simplement pas donner leur consentement, car, en état de manque, ils sont dans l'incapacité de refuser de participer à ce type de recherche (Charland, 2002; Cohen, 2002). D'autres affirment au contraire que même si les toxicomanes ont un fort besoin de consommer, ils conservent la capacité de décider seuls de leurs actes (Foddy and Savulescu, 2006; Levy, 2006). Plus récemment, Walker a émis l'hypothèse que la vérité se situe quelque part entre les deux (Walker, 2008).

Dans quelle mesure la consommation de stupéfiants peut-elle altérer nos capacités? La diversité des réponses à cette question explique, pour une large part, les incertitudes et les désaccords au sujet de la capacité des toxicomanes à donner leur consentement. La poursuite des recherches sur la nature de la dépendance nous aidera peut-être à répondre à cette question. En attendant, elle continue de susciter de graves inquiétudes quant à la participation des toxicomanes. Pour dissiper ces incertitudes, on pourrait par exemple prendre des mesures visant à garantir que le processus de demande de consentement crée les conditions optimales pour que la personne toxicomane donne un consentement libre et éclairé. Il faudrait, pour ce faire, s'attacher à plusieurs aspects du problème, notamment : la nature de la recherche, les circonstances dans lesquelles le consentement est obtenu, les différents éléments incitatifs et le degré de complexité des informations fournies aux éventuels participants.

Dès lors que l'on conçoit les projets avec soin, il devient possible de garantir que les toxicomanes donnent leur consentement en toute liberté. Cela étant, même lorsque les conditions idéales ne sont pas réunies, il est envisageable de poursuivre les recherches. Toutes les règles qui encadrent la recherche sur des sujets humains autorisent en effet certains travaux, dès lors que des garde-fous supplémentaires sont mis en place, et ce, au cas par cas. Ces garanties, qui diffèrent quelque peu selon l'endroit, comprennent en général les éléments suivants : obtention du consentement d'un représentant (parent ou enfant de la personne devant participer à la recherche par exemple), risque nul ou minimal pour le participant, bénéfices que peut attendre le participant (ou, parfois, le groupe concerné par la même pathologie – dans notre cas, les toxicomanes).

Ces réflexions nous conduisent à la seconde question majeure : dans quelle mesure la recherche présente-t-elle un risque ou un avantage pour un sujet donné ? Particularité de la recherche sur la toxicomanie : les réponses à cette question ne font pas l'objet d'un consensus et il apparaît en outre difficile de déterminer qui doit trancher.

Si la personne toxicomane est en pleine possession de ses capacités et est en mesure de donner son consentement libre, la pratique générale nous dicte tout simplement la réponse : cette personne est la mieux placée pour prendre la décision (Beauchamp et Childress, 2008). Les choses ne sont pourtant pas aussi simples. On peut en effet arguer qu'il n'est pas acceptable d'exposer une personne toxicomane à certains risques, quand bien même elle les accepterait (par exemple, le risque d'être mis dans une situation qui pourrait favoriser les rechutes – voir Cohen, 2002). Plus complexe encore, le cas d'une personne qui n'est pas en état de donner un consentement valable ou pour qui il demeure, aux yeux des chercheurs, des incertitudes quant à sa capacité de le faire. Le fait d'exposer cette personne à certains risques sans son consentement apparaîtrait problématique sur le plan de l'éthique.

Dernier point que je souhaite aborder dans cette partie : le risque que les obligations du chercheur vis-à-vis des sujets n'entrent en conflit avec ses obligations, au sens large, vis-à-vis de la société. Du fait de la nature même des recherches en toxicomanie, le chercheur a parfois accès à des informations concernant des activités illégales ou dommageables : possession ou fourniture de produits illicites, activités illégales auxquelles les toxicomanes se livrent pour financer leur consommation (vols, prostitution ou autre), etc. Apparaît alors une question éthique : quelle attitude le chercheur en possession de telles informations est-il censé adopter ? D'un côté, il est tenu au secret médical vis-à-vis des participants à la recherche ; de l'autre, il doit essayer de protéger des tierces personnes éventuellement concernées.

Il est difficile de savoir dans quelle mesure cette problématique sur les obligations du chercheur se présente en pratique pour ce qui concerne la toxicomanie. Il n'en reste pas moins qu'au cours de leurs échanges, les membres des comités d'éthique sont confrontés à cette question tout particulièrement dans ce domaine. Il importe donc que les chercheurs examinent l'attitude à adopter dans de telles circonstances. Les autres domaines de recherche présentant une problématique analogue suggèrent un élément de réponse : les chercheurs doivent avoir élaboré un plan précisant l'attitude à adopter face aux différentes informations qui peuvent se présenter et veiller à ce que les candidats à un projet de recherche aient connaissance de ce plan avant de donner leur accord.

Problèmes éthiques soulevés par la nature ou les objectifs de la recherche

Après avoir examiné les problèmes éthiques soulevés par la participation de personnes toxicomanes aux recherches, j'aborde maintenant le second volet de cette problématique, à savoir, plus généralement, les conséquences de la recherche. À ce propos, j'insisterai sur deux aspects : dans un premier temps, la recherche sur les méthodes visant à modifier les préférences des individus et, dans un second temps, les effets, au sens large, des recherches dont le but est de réduire la probabilité qu'un individu devienne toxicomane.

Certaines recherches actuelles en toxicomanie tentent de déterminer s'il est possible de modifier les préférences et le comportement futur des individus. Le principal problème d'éthique qui se pose ici doit être étudié sous deux angles : le traitement est-il destiné à des adultes ou à des enfants ? Est-il donné à des personnes toxicomanes ou non toxicomanes ? Le débat éthique sur ces questions dans le cadre de la recherche sur la toxicomanie porte principalement sur la recherche de vaccins contre la dépendance aux drogues (vaccins contre la dépendance à la cocaïne par exemple), sujet que je souhaite développer ici (Hall et Carter, 2004 ; Ashcroft et Franey, 2004 ; Hayry, 2004).

Le vaccin contre la dépendance à la cocaïne pose-t-il un problème éthique? Cela dépend de l'utilisation qui en est faite. Administré exclusivement à des adultes toxicomanes qui, en pleine possession de leurs capacités, souhaitent éviter une rechute, le vaccin ne semble pas poser de problème particulièrement grave. En revanche, son éventuelle utilisation sur des personnes toxicomanes sans leur consentement (parce qu'elles ne sont pas en mesure de le donner par exemple) ou sur des enfants dans le but de prévenir une toxicomanie future se révélerait problématique sur le plan éthique. Dans le premier cas, le risque est d'attenter à la liberté de la personne, voire de modifier sa personnalité – prise de risque à éviter en général.

Dans le second cas, le problème réside dans le non-respect du droit de l'enfant à un avenir ouvert à tous les possibles : nous ne devons pas restreindre ses choix mais lui laisser un maximum de possibilités parmi lesquelles il pourra choisir à l'âge adulte. Les mesures visant à modifier son comportement futur face aux drogues semblent violer ce principe et pose donc un problème (Hayry, 204), dont la gravité dépend, dans une certaine mesure, de la valeur des possibilités dont on l'a dépossédé. Or, le priver, grâce à un vaccin, de la perspective – fût-elle peu souhaitable – de devenir toxicomane pourrait avoir des effets indésirables sur d'autres domaines de sa vie (intégration parmi ses pairs par exemple).

Les recherches sur les produits dont l'utilisation soulève ce type de problèmes éthiques posent elles-mêmes un double problème. Premièrement, si le produit final ne présente pas de garanties d'utilisation acceptables sur le plan éthique, ou s'il doit être interdit au vu de risques trop importants de mauvaise utilisation, il peut être préférable d'arrêter les recherches et d'en réaffecter les fonds et le personnel à des travaux sur d'autres traitements. En conséquence de quoi, il n'est pas inutile d'examiner, le plus en amont possible, les problèmes éthiques soulevés les recherches sur des produits tels que les vaccins contre la dépendance à la cocaïne — même s'ils ne sont pas encore disponibles. Deuxièmement, ces mêmes problèmes éthiques apparaîtront lors de l'essai du produit pendant le processus de recherche, rendant ainsi le processus lui-même discutable sur le plan éthique.

Enfin, j'évoquerai brièvement les conséquences, sur un plan plus général, des travaux de recherche visant à « soigner » la toxicomanie, à en atténuer les effets les plus graves ou à réduire les risques de dépendance dus à l'expérimentation. En fait, en réduisant les dangers liés à l'expérimentation sur les drogues, il est probable qu'on augmente les comportements à risque (effets déjà observés dans d'autres contextes). Les avancées de la recherche sur la toxicomanie risquent donc d'augmenter l'incidence des problèmes — autres que la dépendance — dus à l'usage de drogues. En déterminer la gravité est, à l'évidence, une question empirique, qui ne fait pour l'heure, à ma connaissance, pas l'objet de recherches. Cela étant, l'apparition éventuelle de tels problèmes ne signifie pas nécessairement qu'il faut arrêter les recherches visant à aider les toxicomanes. J'estime au contraire que les planificateurs et les financeurs de projets doivent prendre du recul et réfléchir aux effets de la recherche sur la toxicomanie dans son ensemble, sans se polariser exclusivement sur la question de la dépendance.

Conclusion

J'ai tenté de donner ici une vue d'ensemble des principaux problèmes éthiques que posent les recherches actuelles sur la toxicomanie et qui ont toutes les chances d'être pointés par des instances de surveillance éthique. À l'évidence, cette étude ne couvre pas l'ensemble des questions éthiques qui se posent en la matière. Je citerai deux exemples. Le premier concerne les effets de stigmatisation que peut avoir la recherche sur les personnes toxicomanes ou sur ceux chez qui l'on découvre une prédisposition à la toxicomanie. Pour évaluer la gravité de ce problème, il faudrait savoir si ce type de recherche augmente les préjugés dont sont déjà victimes ces groupes de personnes. Deuxième exemple, les modalités de financement des recherches et la possibilité que les financeurs décident de l'orientation de ces recherches. Autant de questions sérieuses qui mériteraient qu'on s'y attache et dont l'impact sur le plan éthique est peu connu, d'où l'intérêt de poursuivre les débats ainsi que les recherches en matière de toxicomanie.

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Ethical Issues Raised by Current Research on Drug Addiction

Dr Tom Walker Centre for Professional Ethics Keele University United Kingdom

Overview of what's to come

- Setting the context
- Ethical issues raised by the use of addicts as participants in research
- Ethical issues raised by the nature of research/ the aims of research
- · Concluding comments

2

Many of the ethical issues that arise in research on drug addiction are similar to those that arise in other types of research:

- For some of these the fact that the research is into drug addiction makes no real difference to the ethical issues under consideration
- For others, the topic of the research makes the ethical issues particularly pressing or important

Here I want to focus primarily on the latter

into drug addiction, each of which raises different ethical issues, this means that the issues I will focus on will apply to some research projects more than others.

· Given the variety of different types of research

 I will use examples of research projects to illustrate the various ethical issues. Some of these will refer to research carried out a few years ago where this presents the issues in their clearest light.

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- It is also worth noting that what are seen as the most prominent and important ethical issues raised by a research project can, and often do, vary from culture to culture and country to country.
- There is, however, across Europe a fair degree of common ground on what the issues are, and it is this that I will concentrate on here.
- Finally, before we get to discussion of the issues, it is worth noting that there is a two way connection between research and ethics in this area.
- As we will see, many of the ethical issues depend on the extent to which drug addicts' abilities are compromised by their addiction. As research tells us more about this it will help to clarify these issues and point to ways in which we might deal with them in an ethically acceptable manner

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For each of the issues considered below I will:

- Explain what the issue is
- Explain why this is a particular problem for current research into drug addiction
- Outline the range of positions that have been taken on how to deal with this, or with similar issues in other contexts

Ethical issues raised by the use of addicts as participants in research

- Issues around consent/ competence/ voluntariness
- Issues around risks and benefits to the participant
- Issues around potential conflicts of duty towards the participant and society/ other individuals

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Consent, Competence and Voluntariness 1

- A standard requirement for ethically acceptable research is that any human participants have given their consent to take part.
- Furthermore, for this to be valid consent it must be both voluntary and informed, and the person giving it must be competent to do so.

Consent, Competence and Voluntariness 2

Perhaps the most common ethical concern with using drug addicts as research participants has been that they are unable to give valid consent

- Either because they lack the competence to do so
- Or because their participation is not really voluntary.

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Consent, Competence and Voluntariness 3

- The reason for this lies in the nature of addiction. Strong, perhaps irresistible, desires, difficulty in sticking to decisions to stop taking drugs, and the effects of intoxication and cravings all make for problems in understanding research and making decisions about whether or not to take part in it.
- How serious these problems are will vary from research project to research project.

Consent, Competence and Voluntariness 4

This became the subject of particular debate when considering trials of the effectiveness of heroin prescription as a treatment.

- On one view widely expressed at the time, addicts cannot consent to take part in such research as they are unable to refuse to do so, given their craving for the drug
- On an alternative, and also widely stated view, addicts can agree to take part in such research, as although they have strong desires for drugs they retain the ability to make decisions about what they will do.

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Consent, Competence and Voluntariness 5

Coming out of this debate it would seem that obtaining valid consent from addicts to participate in research can be difficult, and that a range of features need to be considered when doing so, including:

- The nature of the research
- The setting/ context in which consent is obtained
- The nature of any incentives to take part in research
- The complexity of the information that addicts will be required to understand
- The ease with which addicts can withdraw from the

Consent, Competence and Voluntariness 6

- For those research projects where addicts are not able to give valid consent, then the research may still be able to go ahead.
- But if it does then additional safeguards need to be built into the research process.
- Modelling this on other types of research involving incompetent adults, these will include such things as: proxy consent, minimal risk to the addict, potential benefits for the addict etc.

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Risks and benefits to research participants 1

- This leads us into the second major ethical issue in using addicts as research participants.
- Different research projects vary in the extent to which they aim to benefit the participants in that research.
- Research projects also vary in the risk of harm that they pose to their participants.

Risks and benefits to research participants 2

In the context of research into drug addiction this raises three interlinked ethical concerns:

- What counts as a benefit/ risk of harm when it comes to drug addiction?
- Who should make this decision?
- Is it acceptable to enrol drug addicts as participants in research that may pose some risk to them, or may not benefit them?

Risks and benefits to research participants 3

- These questions are perhaps easiest to answer when the addict is competent to make the decision for him or herself.
- In that case the decision is best left to her, and if she decides the benefits/ risks of participation are acceptable, then it is acceptable to enrol her as a participant in the research.

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Risks and benefits to research participants 4

Where the addict is not competent to make the decision, then there seem to be two ways in which we could go:

- We might decide on the basis of what the addict would decide to do if he were competent to make the decision himself,
- Or we might decide on the basis of what is in his best interests.

Both of these have problems.

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Risks and benefits to research participants 5

- The problem with trying to base a decision on what the addict would decide is that it is extremely hard to know what this is.
 - It is a feature of addiction that many addicts seem ambivalent about their drug taking behaviour.
 - They want to stop, and then appear to change their minds and start consuming again.
 - Their decisions/ preferences do not appear stable over time.
- It is worth noting that this is also a problem with competent addicts.

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Risks and benefits to research participants 6

If we try to decide on the basis of what we judge to be in the addict's best interests this also creates problems for research:

- It is often held to be problematic to enrol people in research for their own benefit – especially if they are competent to make decisions for themselves.
- Not all research into addiction aims to benefit the addict himself, and so on this standard using addicts as participants in such research looks ethically problematic.

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Conflicting duties 1

It is in the nature of research that uses drug addicts as participants that researchers may come across information about activities that are illegal and/ or that may pose a risk to others, for example:

- Information about possession of illegal drugs
- Information about the supply of illegal drugs
- Information about activities (e.g. theft, prostitution) that addicts may be engaging in to fund their addiction.

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Conflicting duties 2

In these cases an ethical issue arises about what the researcher should do with that information.

- On the one hand, there is duty of confidentiality that researchers owe to their research participants, and concern about the effects on future recruitment if the researcher reveals the information to the authorities
- On the other, there are our responsibilities to act to prevent harm to others where we can do so (e.g. if the researcher found out about drugs being supplied to children they may well have an obligation to take steps to protect the children's welfare)

22

Conflicting duties 3

- What ought to be done here will, clearly, vary from case to case.
- But, a common position is that for such research to be ethically acceptable:
 - The researcher must have a plan for what to do in such cases,
 - And, must have let research participants know what that plan is.

Ethical issues arising from the nature, or aims, of the research

- Research looking at ways of changing people's preferences or future behaviour
- Concerns about protecting a person's 'right to an open future'
- · Concerns about encouraging drug use

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Research aimed at changing preferences 1

- Some current research into drug addiction looks at ways in which we might change the preferences of people:
 - These might be existing addicts, as a way of helping overcome their addiction
 - Or it might be non-addicts, as a way of preventing them becoming addicted.
- Both of these appear to raise ethical issues.

25

Research aimed at changing preferences 2

- What these issues are depend on whether the individual whose preferences we are seeking to alter is an adult or a child.
- I will start by considering the adult case, and then move onto consider children.
- In doing this I will focus on research into drug vaccinations (for example, cocaine vaccinations).

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Research aimed at changing preferences 3

- The fundamental ethical concern when it comes to research aimed at changing preferences/ behaviour is that in doing so we are undermining the autonomy, or compromising the authenticity of the individuals concerned.
- This is, normally, something that we ought not to do.

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Research aimed at changing preferences 4

This creates two concerns for such research:

- That we ought not to be doing this in the research context
- That even if we did know how to do it, we ought not to do so – and hence the research does not look valuable

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Research aimed at changing preferences 5

- How serious this issue is depends to some extent on whose decision it is to change someone's preferences.
- If the person is competent, and makes the decision (say to take a cocaine vaccination) herself, then this does not look too worrying.
 - We can surely make such decisions concerning our own future

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Research aimed at changing preferences 6

- However, is we are attempting to change the preferences of someone else this is more worrying.
- If the person is an autonomous individual, it is widely held that doing this would be ethically wrong – even if it was done for their own good.
- If the person is not autonomous, then perhaps the concerns are less (in that you cannot undermine the autonomy of someone who is not autonomous).

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Research aimed at changing preferences 7

- However, as we have already seen the extent to which a drug addict is autonomous, and the extent to which we can discern what their preferences really are, is problematic in itself.
- For this reason there will remain ethical concerns about the justifiability of intervening to change the addict's preferences (although I do not wish to suggest that these concerns cannot be overcome).

The 'right to an open future' 1

- I suggested earlier that you cannot undermine the autonomy of someone who is not autonomous and so the concern we have been considering is not so pressing in such cases.
- However, there is another concern here which has been raised in relation to things like vaccination programmes for children.
- This is sometimes captured by referring to the child's right to an open future.

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The 'right to an open future' 2

- What is meant by this is that we ought not to shut down options for children, rather we should leave them with as broad a range of options as possible and let them make their own decisions about what path to take when they come of age to do so.
- Steps to affect a child's preferences or behaviour concerning drug taking in the future would seem to violate this requirement.

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The 'right to an open future' 3

- Of course, how serious a problem this is will depend to a large extent on the importance or value of the options that have been removed.
- The ethical debate here concerning drug vaccinations has focused on just this issue.

34

The 'right to an open future' 4

- No-one is arguing that the option of becoming addicted is of value.
- But in order to prevent this we may have to prevent preferences or behaviour which may have some value in the environment in which the child lives – such as experimenting with drugs, fitting in with their peers etc.

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The 'right to an open future' 5

- Furthermore, there is a concern that once we allow behavioural vaccinations in a case like addiction, this will open the door to interventions which are more morally problematic but which use a similar method.
- Thus, there may well be an ethical issue about opening the door to behaviour which is ethically problematic (even if the first step is okay in itself)

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Encouraging drug use 1

- Finally, I want to look at an issue that has come up when looking at research that would either 'cure' addiction, alleviate its more serious effects, or reduce the chance that consumption of a drug will lead to addiction to it.
- This is a worry that in such cases people may be more likely to experiment with the drug.

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Encouraging drug use 2

- The underlying thought here is that some people are restrained from experimenting with drugs because of the risks of doing so, including the risk of becoming addicted.
- If research allows us to experiment without facing the same risks, these people will be more likely to do so.

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Encouraging drug use 3

- To the extent that this is thought to be a problem (which it is likely to be given other risks involved in taking drugs), then research into addiction may create this type of problem for society.
- If this is a more serious problem than that posed by addiction, this would suggest that we ought not to do research that might have this effect.

Encouraging drug use 4

- This is, to a large extent, an empirical issue and one on which we have no data.
- This may suggest we should be cautious about what research we do.
- However, in response to this it is argued that we should not limit research into known problems just because there is a possibility, as yet unsubstantiated, that the results will create more serious problems.

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Concluding remarks

- Clearly there are ethical issues that arise in current research into addiction that I have not had time to deal with here.
- · For example:
 - To the extent that some research may involve misleading participants about the nature of the research, this raises standard issues concerning decention
 - To the extent that animal models are used, this raises standard issues about the use of animals in research. In addition, to the extent that people think that addiction is not an illness, or is a self-inflicted illness, this may affect their judgment of the ethical acceptability of using animals to study it.

Concluding remarks continued

Instead I have attempted to give an overview of the main ethical issues that arise when looking at current research into addiction, and the main issues that are likely to be raised in ethical scrutiny of such research.

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Concluding remarks continued

To summarise, these are:

- Concerns about the competence of addicts to consent to participate in research
- Concerns about risks and benefits to addicts if they participate in research
- Concerns about what the researchers ought to do if they uncover information about illegal or harmful activities
- Concerns about intervening to alter the preferences/ behaviour of individuals
- Concerns about the further impact of research into addiction on society.

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Concluding remarks continued

- Where possible I have indicated ways in which we might respond to these types of ethical worry.
- As time is limited I have been brief on this, in order to more thoroughly go into the issues themselves. But I am happy to say more about this in questions or further discussion.

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Thank you for your attention

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APPENDICES / ANNEXES II

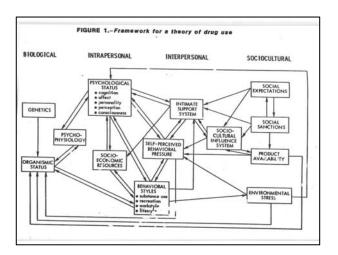
Presentation from Prof. Alfred Springer, representative of the Prevention Platform

The ethical dimension of addiction research: impact on prevention

Prof. Alfred Springer, MD
Pompidou meeting Dubrovnik
Oct. 1. 2008

A starter: Some remarks on prevention

 The leading concept regarding addiction nowadays is the bio-psycho-social model. It views addiction as a complex phenomenon, that develops from an interaction of influences from the drug taken, the individual (his organic and psychic conditions) and the environmental strata - as that extraordinary informative scheme from an earlier NIDA publication well demonstrates.



Definitions (EMCDDA) and clarification of concepts

- Environmental approaches are prevention measures that operate on the level of social, formal and cultural norms about alcohol, tobacco and also cannabis, mostly by shaping attitudes, normality perception and values regarding legal drug consumption.
- universal prevention intervenes on population level
- · selective prevention at (vulnerable) group level,
- indicated prevention on individual (vulnerated) level,

Universal prevention

 Universal prevention strategies address the entire population (national, local community, school, neighbourhood) with messages and programmes aimed at preventing or delaying the abuse of alcohol, tobacco, and other drugs.

Universal target group

 The universal target group is the group of people, households, organisations, communities or any other identifiable unit which a prevention intervention is directed towards. A careful analysis and estimation of the size and nature of the target group are essential preconditions when documenting the need for a prevention activity.

Selective prevention

 Selective prevention strategies target subsets of the total population that are deemed to be at risk for substance abuse by virtue of their membership in a particular population segment, e.g. children of adult alcoholics, dropouts, or students who are failing academically.

Indicated prevention

 Indicated prevention aims to identify individuals who are exhibiting early signs of substance abuse (but not DSM-IV criteria for addiction) and other problem behaviour and to target them with special interventions.

universal-selective-indicated prevention?

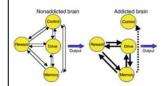
- The distinction between universal-selective-indicated prevention is the level of "filter" applied for riskattribution.
- For universal prevention, there is no filter (all are considered at equal - low - risk).
- For selective prevention, the filters are social and demographic indicators relating mostly to groups: marginalised ethnic minorities, youth in deprived neighbourhoods, young (drug law) offenders, vulnerable families; hence a rather raw filter by institutional or technocratic indicators.

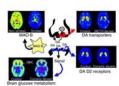
 For indicated prevention however, the individual at risk itself needs to have a "diagnosis", a risk condition attributed by a professional, e.g. Attention Deficit Disorder, Conduct Disorder, etc.

New research – new concepts

Metatheoretical level

- The "addicted brain" (Volkow et al)
- The "addiction memory" (Böning et al)





Types of treatment / prevention considerations derived from that modeling:

- Vaccination
- · "Pharmacological psychochirurgy"
 - Pharmacological manipulation of the dopaminergic system
 - Pharmacological manipulation of the cholinergic system

Tendencies regarding the preventive use of the new treatment technologies

- 1. Vaccination (against cocaine and amphetamine but also against nicotine)
- The cocaine vaccine (TA-CD) has the potential to be an effective treatment tool for recovering addicts (relapse control in cases of cocainisms and concomitant use with maintenance treatment).

- It also seems to present opportunities for non-therapeutic uses, such as preventing cocaine use in the first place (some authors label that approach "lifestyle vaccination").
- The same holds true regarding amphetamine vaccination.

Vaccination in the context of different types of prevention

 General / universal prevention: use of vaccination against nicotine and cocaine in the general population resp. in a certain cohort or age group.

- Specified prevention: use of vaccination for defined and eventually selected groups or individuals at risk. The concept eventually includes probation and other interventions from criminal justice and/or on the private sector. Some authors feel that it is foreseeable that the cocaine vaccine could become a condition of parole or probation, or receiving welfare payments, or for employment in certain occupations. Any situation that involves obligatory drug testing may also be channeled into obligatory vaccination.
- Any such use should raises ethical questions and should be based on sound ethical considerations:
- Are selection criteria and methods compatible with ethical standards?
- Is the concept of unvoluntary or enforced vaccination compatible with ethical standards?

The question of risk related vaccination: primary / secondary (general/selective) prevention and indicated (relapse) prevention

 Since many years prevention specialists are attempting to develop methods for assessing the level of risk and protective factors in children and youth in order to target precious prevention services to those who need them most. Such risk and protective factor assessments include data on biological, psychological, and social factors—primarily family, school, and peer groups.

 To think in selective categories is not alien to traditional concepts of prevention and selective procedures therefore are a regular task of traditional preventive intervention. selective vaccination against drug use as a strategy of prevention makes a big difference

- The traditional orientation of person focused prevention aims at improvement of life conditions and at enforcement of resiliency. In a certain sense these concepts signal hope: improvements regarding certain influences enable the individual to overcome the need for drugs. Contrary to that orientation the person focused approach of vaccination expresses determinism, puts into question the individual capacity for change and, altogether, signals a certain hopelessness.
- The now traditional prevention philosophy aims at increasing the ability to choose while vaccination implicates a reduction of options.
- The concept of vaccination uses the body of an individual to protect him/her against his own mind (desires).
- · It reprograms the body's self protection.

 The ethical problems arising from that strategic orientation someway resemble problems connected with birth control among psychic disabled persons. (The concept of lifestyle vaccination includes considerations concerning contraceptive vaccination – heavily under critic from feminist authorities) Central question: How to select the population resp. the individuals at risk?

The problem of selection of individuals and groups at risk

· Basic issues:

Definition of risks - The risk structure Risk assessment The selection process

Selection can take place using

- · a. biological criteria
 - b. psychosocial criteria
- · c. lifestyle criteria
- · d. vulnerability
 - e. health related criteria

Major cluster factors of biological risk variables

- 1. genetic inheritance of different syndromes (gender limited, milieu-limited, depression-sensitive), differences in metabolism and reactions to alcohol and other drugs, biochemical and neurological vulnerabilities, and temperament (ANS) differences, or cognitive (CNS) structural differences.
- 2. in utero damage to the fetus that could result in central or autonomic nervous system problems, and/or physical and biochemical damage that could make a child temperamentally or psychologically more vulnerable to alcohol or drug use.
- These biological cluster variables are temporally ordered with genetic factors preceding in utero or later physiological damage to the child's biology. Additional biological cluster or individual variables could be added to the framework as discovered by empirical research.
- The presence of any one of these biological conditions is generally not sufficient for the expression of alcoholism or drug dependency later in life. When a number of these biological factors converge and interact with nonsupportive and negative environmental conditions, however, these "diseases of life-style" can emerge.

Psychosocial risk factors.

- family variables include family attitudes and values, which interact with family stressors (i.e., conflict, poverty, parent, or sibling use of drugs), as buffered by positive family coping skills and resources (i.e., communication, problem solving skills, life skills, and external social and material support).
 communitylschool variables including communitylschool attitudes and values towards prosocial activities and alcohol or drug use, which interact with communitylschool stressors (i.e., poverty, high crime rates, high population density, impersonal climate, discrimination, conflict or noncooperation and support, pressures to use drugs), as buffered by coping skills and resources (i.e., positive leadership, good problem solving skills, education, prevention, and treatment resources).
- 3. peer\social variables including peer attitudes and values towards prosocial activities and alcohol and drug use, which interact with peer stressors (i.e., peer conformity pressure, developmental adjustment issues, poverty, lack of emotional or material support, depression and poor mental health, lack of opportunities, academic, job and social adjustment problems) as buffered by peer coping skills and resources (i.e., social support, effective group problem solving, conflict resolution and communication skills); comittment to a special type of youth culture .

- · 3. temperament or other physiological differences that could occur at anytime after birth due to sickness, accidents, physical trauma, improper diet, exposure to toxins, or alcohol or drug use (that includes traits like "sensation seeking").
- · 4. Variables of cultural affiliations and interest for cultural products: special types of music, movies, etc.
- · To calculate the risk such observed risk factors have to be weighted against protective factors (resilience).

"predisposition" to addiction (vulnerability)

 In the traditional interpretation of drug addiction as a disease a certain "disposition" for addiction was proposed. That disposition was described to express a "week will, a piteous squashiness of emotions and an abnormal excitability of the nervous system". Without such a disposition addiction was classified to represent a vice. The disposition was interpreted to be at least partly hereditary.

Etiological models/theories

- · 1. Psychiatric:
 - a. Nosological model
 - b. Multicausal model
- All these models contain the notion of a "predisposition"; the nature of that condition remains unclear. Some actual research initiatives, using new research methods are possibly apt to clarify the issue.

Type of actual research

- · Neuroscientific; molecular level; genetics
- · Dopaminergic system
- Cholinergic system
- Neuroanatomical research; brain localisation of certain activities, lifestyle components and interests.
- · Metatheoretical level
- · The "addicted brain" (Volkow et al)
- · The "addiction memory" (Böning et al)

Research on genetics - Genetic vulnerability

- According to Volkow the number of D2 receptors is a contributing factor for the vulnerability regarding dependency. A low number means a higher risk for becoming dependent from cocaine, alcohol, amphetamine or heroin, while a high number seems to be even protective against f. i. craving for cocaine.
- It is possible that an innately lower number of receptors might represent that preconditioning factor but also that that low number might result from drug use.

Volkow hypothesized, that vulnerability to addiction may have two stages:

- 1. the desire for new experiences when first taking a drug and
- 2. a subsequent accumulation of neural adaptations to repeated drug-taking that moves the user down the road to addiction.

Age and vulnerability

 Adolescents, whose brains are still developing and who normally seek out new experiences as a part of their developmental process, may therefore generally be at particular risk for substance abuse.

but

The predictive power of genetic research according to Volkow

 "After all, many people with naturally low D2 levels do not become addicts, and some who have protective genetic factors do go on to become addicted,"

Conclusion:

Genetics alone therefore cannot completely explain vulnerability to addiction.

Comorbidity

 Clinical research shows, that addiction is often combined with other types of mental illness or personality disorders (Affective disorders, impulsive disorders, compulsion, borderline states, narcissistic personality etc.). The two or more syndromes can parallel each other, or can be the expression of a uniform mental disease. Addiction therefore may be caused by a mental illness or a personality disorder or may be part of it. The mental or psychic disorder may increase the vulnerability for becoming a problematic drug user.

Psychosocial considerations of vulnerability

 Literature reviews show research support for the impact of environmental factors on vulnerability to alcohol and drug dependency. That approach has found support even from animal studies in the context of research on dopamine structures. • In one study, researchers used positron emission tomography to scan the brains of rhesus monkeys living in individual quarters, then put them into communal housing and repeated the scans (Morgan et al, 2002). "Whereas the monkeys did not differ during individual housing, social housing increased the amount or availability of dopamine D2 receptors in dominant monkeys and produced no change in subordinate monkeys," the study reported. Subordinate monkeys self-administered cocaine more often than dominant ones.

The importance of inheritance ? – the nature / nurture controversy

- The same holds true concerning the importance of heredity. The increasing visibility of young problem drinkers and drug takers has raised again the question of heredity, that dominated the "degeneration" theory of the late 19th century.
- In a modern view the impact of biological, genetic heredity is limited. Heritability nowadays is said to say nothing about the ways in which genes and environment contribute to the biological and psychological process of development. Genetic and environmental influences most often interact (f.i. Bateson, 2004).

In the context of the bio-psychosocial model

- Most researchers accept that besides biological factors environmental and social influences have significant roles in the impetus to try drugs and in relapse.
- Most researchers accept the hypothesis that the more risk factors, the greater the vulnerability to drug abuse.

The ethical dimension

Conclusions regarding the ethical assessment of vaccination projects

- 1. The ethical conclusions have to be in line with overall standards.
- 2. They furthermore should be based on an assessment of the quality of basic research and it's predictive power as well as on an assessment of social research and of the predictive quality of the assessment of risk factors.
- 3. And they have to be based on a cost value ratio. Relevant questions: What are the benefits to be awaited? Are there shortcomings which also could be awaited? Are the benefits so strong, that they even overrule ethical concerns?

Assessment of the quality of research: basic questions

- · Are the results proven?
- · How specific are the results?
- Are they strong enough to fulfill the premises of specified or indicated prevention
- · and especially

 Are the proposals regarding the chances of "medication assisted prevention",resp. "lifestyle vaccination", which are derived from research, based on proven knowledge or more or less speculative?

Ethical considerations regarding the use of genetic research

 Screening for populations at risk because of biological factors might include notions for the sensible concept of "genetic testing".

The special ethical problem of Genetic screening.

- Genetic testing and screening is an issue of ethical concern. On European level working groups on BioEthics issues and research ethics have been installed. The European commission in 2004 produced a publication on 25 recommendations on the ethical, legal and social implications of genetic testing. Another document of reference for our issue is the commission's publication on Ethical aspects of genetic testing in the workplace from 2003. That document reproduces the opinion of the European Group on Ethics in Science and New Technologies reported to the European Commission.
- For our discussion point 2.9. and point 2. 10 of the latter document are of interest. The authers pointed out, that 2.9.....(Genetic tests) still have uncertain predictive value
- 2.10: The Group considers that, in general, the use of genetic screening in the context of the medical examination, as well as the disclosure of the results of previous genetic tests, is not ethically acceptable.....Thus, employers should not, in general, perform genetic screening nor ask employees to undergo tests.
- Exceptions are formulated under 2.11. and 2.12 of the document. Use of genetic screening could be considered when it may be necessary to guarantee health protection of workers or protection of third parties. But even then they only could be considered if there is scientifically proved evidence that the genetic test is valid and the only method to obtain the information.

Accuracy of research and undesired effects from the application of research for preventive aims

Selection based on biological variables

· A thorough examination of scientific literature shows, that it seems not possible to select aspirants for vaccination as a tool of primary prevention on biological grounds. There is no simple gene and no known genetic variation that directly leads to drug use and to addiction and there are no variants in brain conditions which really singularly determinate who will become addicted.

Selection based on psychosocial variables

· They are weak predictors too. Even under high risk conditions only a minority of youngsters will use cocaine. Keeping that in mind it is extremely important to be aware of possibly negative consequences of selection.

Cost - value ratio

· What are the benefits and what are the costs to be awaited from lifestyle vaccination as strategy of prevention?

Benefits

- 1. individual level: to protect individuals against the urge to use a specific drug. That could be done either in a more general "universal preventive" way, or following specific objectives from selective and indicated approaches (adapted to the needs of special risk groups and individuals), tertiary prevention (a kind of treatment) and quarternary (relapse avoidance) prevention.
- 2. Social level:
- Crime prevention: impact on illicit drug production, trafficking and on drug abuse related delinquency.
- Public health: reduction of the incidence of drug related health problems
- Reduction of costs on the health sector

Costs / shortcomings / unintended effects - an outline

· All these unintended and undesired effects are dependent from the size of the programme. They are not awaited to cause a major problem if vaccination is used as therapeutic strategy in a defined treatment setting on voluntary basis.

Unintended and undesired effects on consumer level

- Vaccination against the effects of one drug (f. i. cocaine) does not block the use of other drugs. It may even increase the use of other substances, since polydrug use is the rule in drug using segments.
- Vaccination does not even guarantee, that the targeted drug is not used by the "protected" population. There may be a shift regarding motivation for use: People will snort cocaine or smoke tobacco not because they like the effect of the substance but out of social reasons (like belonging to a certain group).

Unintended and undesired effects on social norm

 According to the generational forgetting model of Musto and Johnston the increasing visibility of dangerous effects of drug addiction trigger a reduction in initiation. Reducing the perception of danger through interventions like depot medications or vaccination might even encourage drug use and increase drug consumption among the using population.

Unintended and undesired effects on the "unprotected" population

 Risk analysts point out, that technolocical risk reduction often is followed unintentionally - by an increase of the prevalance and/or intensity of the risky behavior (MacCoun and Reuter, 2001)

Unintended and undesired effects on the illicit drug market and on drug trafficking

- Dealers may move in the direction of other psychoactive substances, not targeted by vaccination
- Drug selling organizations may move to regions where the programs are not available or less used.
- Drug selling organizations may use the vaccinated "protected" individuals for dealing. A dealer who is not using himself is much more reliable.
- The drug scene may become more violent, since dealers have to compete more aggressively to protect their share in a situation of a diminishing number of drug buyers.

Unintended and undesired effects on current users and current non-users

- From other vaccination programs and from other risk reducing interventions we could learn that a vaccine, if not used perfectly prophylactic, may reduce the awareness or danger related to the risky behavior. The reduction of risks may stimulate compensatory behavioral responses.
- There may be an increase in dosage among "protected" ones who want to feel the effect of the drug.
- That tendency might spread throughout the drug using population with damaging effects. Current users who are not enrolled in a pharmacological program may increase their consumption. Current non-users may be more willing to try the substance.

Unintended and undesired effects on the drug and tobacco industry

- Drug producers may develop new formulations of their product that mimic the targeted drug without being blocked by immunological treatment.
- The tobacco industry may seek for new users and develop new strategies in markets where vaccination programs are not implemented. The industry may also develop new ways of advertising.

The statistic problem

 Epidemiological data on cocaine use show, that it is a minority behaviour with low prevalence in the general population. If this prevalence is lower than two percent screening procedures make no sense at all.

. Assessment of power and importance of vaccination programmes

 The power of vaccination programmes seems to be exaggerated. A revision of the ideas shows, that it is neither a magic bullet against individual drug use nor against the drug markets. It's effectiveness is limited to the concrete use of a certain targeted substance and it has no effect on other risk factors and on "addiction as an illness".

Need for communication

- At the time given there is a need to an informed community debate about what role, if any, a cocaine vaccine may have as a way of preventing cocaine addiction in children and adolescents.
- The same holds true for all other comparable programmes.

Vaccination conditions –basic questions

- Being aware of a very limited effectiveness of vaccination programmes for preventive objectives should the option of general or universal vaccination be kept alive or should it be abolished?
- If accepted as a method of treatment and prevention, should vaccination only be possible on the basis of free choice? Or is it ethically justified to use it as a kind of enforced treatment? Under which conditions would that approach be justifiable?

Obligatory vaccination outside a treatment contract seems highly problematic.

Questions arising

- Is obligatory vaccination as a tool for universal prevention ethically justified, even if:
- · Epidemiologically the risk to use the drug is low
- You cannot predict if a person will use drugs or not
- The injection represents a break into bodily integrity
- The vaccination has to be repeated and therefore good compliance is needed?

Other general ethical problems resulting from the biologistic orientation

We have to discuss the following topics:

Are the recent conceptualisations which are basic for approaches like "lifestyle vaccination" possibly leading to

- Privatization of the addiction diseases with healthistic consequences?
- · Pathologization of eventually normal neuroplasticity?
- · Pathologization of behaviour traits?
- · Pathologization of cultural affiliations and interests?

Ethical questions on social level 1: Danger of discrimination

- Drug use prevalence is relatively high among ethnical minorities and other populations (socially underprivileged) which are at risk for discrimination. These conditions are often used in a discriminating way by populist politics.
- Would screening on grounds of social risk factors be a factor to further stimulate the discrimination of such groups?

Ethical problem on social level 2: Stigma

- In the USA evolved a controversy about the assessment of the importance of neurophysiological processes for drug use, excess behavior and especially over-eating on ethical foundations. Authors like Morgan and B. Altmann Bruno raised the issue of stigmatization.
- "Moreover, we should stop considering adding to the tremendous amount of prejudice and stigma against individuals with unpopular body size by presuming that they possess a psychiatric disturbance." (Am J Psychiatry 165:138, January 2008)
- "Dr. Nora Volkow says we shouldn't stigmatize drugusers, but then she goes around diagnosing them with a brain-rotting disease that most of them don't actually have." (Morgan, 2006)

 In the same direction runs the argument of Peter Cohen, who in 2002 denounced a "Volkovianic world", in which it is usual to talk about an addicted brain and in which the drug user is no more a complex human being with ist own history and in which the individual becomes reduced to a slaved carrier of a deranged brain.

Ethical problem on psychsocial level1.: Stigma and self fulfilling prophecy statement

 Since illicit drug abuse remains a minority behavior the selection of individuals of especially high risk to develop an addiction is strongly stigmatizing and may open the way to self fulfilling prophecy.

Stigma and self fulfilling prophecy- question

 Is there even the possibility that individuals which are selected may either try to counteract certain possible in-group consequences of being identified as a risky person increasing their substance abuse during the vaccination period or develop a strong interest to experiment with the drug after the vaccination period has come to an end?

Ethical question on psychosocial level 2: obstacle to empowerment?

- Would the selection of young people for vaccination on grounds of their social background possibly counteract the power of resilience factors, undermine self esteem and contribute thus to feelings of hopelessness?
- Would it therefore eventually lead to an increased need for drugs?

A dilemma of public health objectives

 The issue of stigma is relevant from a public health perspective since destigmatization is one mayor concern of public health programmes regarding the proper treatment of the mentally ill or disabled. Obviously there is a realm where different attitudes within the public health orientation are crashing: what is more important: the fight against drug use or the objective of destigmatization.

A clarification of that issue on ethical grounds is highly desirable.

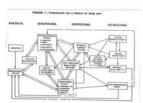
Ethical problem 4: Shift in paradigms:

- Treatment: Treating the addicted human subject vs. fighting against addiction in the human object. The "war on drugs" leaves the streets and enters the brains.
- Prevention: Educating individuals and groups to avoid misuse and other dangerous forms of drug use vs. eradicating the biological foundations of pleasurable drug use. The overstretching of the "infection-metaphor".

Ethical and methodological problem 5: Impact on prevention

A central shortcoming of the new trend

 The stress, thats laid on the preventive power of vaccination transfers the focus to the biological side of the scheme and reduces the awareness of other important risk factors and of the interrelationship between the risk dimensions.



 There is an economic - ethical dimension involved in that issue. In times of restricted spending the more expensive prevention initiatives which rely on improvement of social conditions and education may be abolished and substituted by superficially effective methods like vaccination. Such a process is on the way: In the alcohol prevention field we can observe that person oriented methods in prevention are judged to be too expensive and ineffective while all initiatives to reduce supply / availability are preferred.
 Vaccination programs are metaphorically comparable to supply reduction initiatives since they aim at reducing supply - not on the market but directly in the brain.

Is it ethically justified to switch drug prevention orientation exclusively to programs which aim at availabilty – be it on the market or in the brain?

The dilemma of prevention

 The more mutually reinforcing and coordinated the prevention interventions, the more the impact. However, interveners must understand the total impact of their prevention approach on the person and the total environmental context. In some cases, a particular prevention strategy could have negative impacts on other parts of the system and result in increased drug use.

Ethical problem 3: Misuse- a basic question

 Is there the danger of instrumentalization of research for value laden interpretations and generalizations by architects of social control?

Ethical obligations concerning the transfer of knowledge

 The importance and meaning of neuroanatomical and neurophysiological conditions as regards brain function and their impact on the behavioral dimension should be interpreted cautiously since important aspects are not well understood until now. A good overview concerning that problem can be found in grey literature. (Dissertation of Miriam Marie-Anna Boeker, 2007.)

- Prevention workers are not educated in assessing the findings and interpretations of the neurosciences. Therefore hypotheses regarding causal attributions should be developed carefully. Great care should also be taken to explain these issues and to point at the hypothetical status of recommendations regarding prevention issues derived from actual research.
- The more difficult concepts become the greater is the danger that such a process starts among politicians as well as among _normal concerned citizens". And one has to be aware: what's information for the small circle of professionals who are able to assess the meaning of a message can be misinformation or even desinformation for the broader public. That transformed information can be misused easily for populist reasons.

Ethics of drug policies

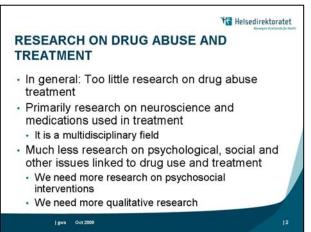
• The road into "Totalitaria": As early as 1957 Meerloo has outlined that direction. He put great emphasis on the importance of free and clear thinking for freedom and democracy. And already at that time he stated "Something has crept into our mechanized system of communication that has made our modes of thinking deteriorate. People casually acquire ideas and concepts. They no longer struggle for a clear understanding. The popularized picture replaces the battle of pros and cons of concepts. Instead of aiming at true understanding, people listen to thoughtless repetition, which gives them the delusion of understanding..."(Meerloo, 1957, p. 137).

Prevention and the fight for a drug-free society

- Ethical considerations should be given to the possibility that vaccination programs are not so much intended to fight human addiction but the use of cocaine (or nicotine) and are a component of the "denormalization" of use and user, that is an objective of that war. Ethical questions which arise would be:
- "Is it compatible with concepts of human rights to use the human brain as a battleground for aims of the War on Drugs?"
- "Is it compatible with human rights to modify structures of the human brain to do away with "dangerous" and/or politically undesired personality traits and cognitive styles?"

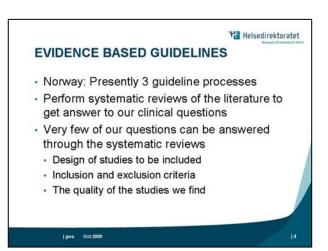
Presentation from Gabrielle Welle-Strand - Researcher, representative of the Treatment Platform



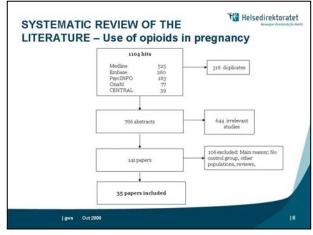


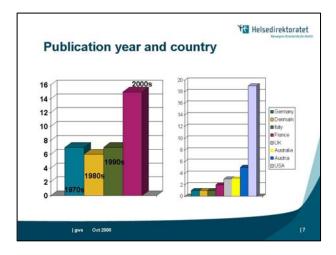
RANDOMISED CONTROLLED TRIALS Gold standard in medicine The process of inclusion and exclusion leaves out most of the patients Conclusions based on this type of research, are they relevant in the real world of treating drug dependent patients with somatic and psychiatric co-morbidity? RCTs – randomised, controlled, but irrelevant? (M.Gossop, Europad 2002)

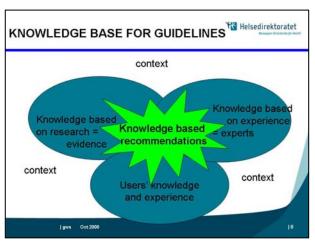
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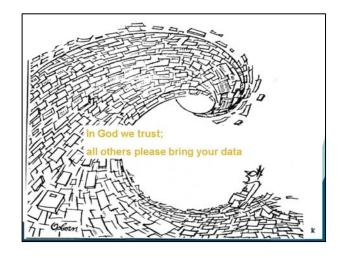
"Evidence-based practice is the integration of best research evidence with clinical expertise and patient values"

American Psychological Association 2003

"Not everything that counts can be counted.

And not everything that can be counted counts. "

Albert Einstein

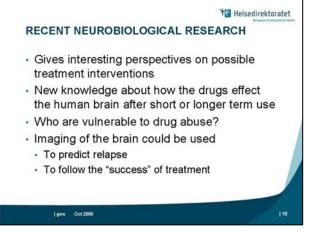


Helsedirektoratet ETHICS CONCERNING RESEARCH ON VULNERABLE GROUPS Last summer there were many articles and a lot of debate in one of the main newspapers in Norway about research on drug users Are drug users able to sign informed consent? Is it ethical to give drug users treatment which usually has long waiting lists in a research setting? (is it voluntary?) What about placebo controlled trials? In one study – 5 opiate dependent patients died

ETHICS CONCERNING RESEARCH ON VULNERABLE GROUPS Last summer there were many articles and a lot of debate in one of the main newspapers in Norway about research on drug users Are drug users able to sign informed consent? Is it ethical to give drug users treatment which usually has long waiting lists in a research setting? (is it voluntary?) What about placebo controlled trials? In one study – 5 opiate dependent patients died

Politicians/governmental bodies put limitations to drug treatment proven by research to efficient Drug users are treated different from other medical patients (moralistic views) Examples Limited number of patients to be treated Age limit to enter treatment Efficient treatment illegal Limits to medication dose level









Presentation from Dike van de Mheen, representative of the Research Platform

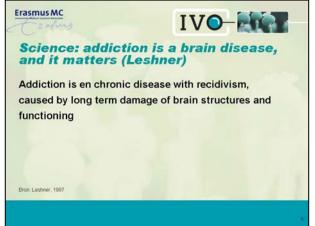


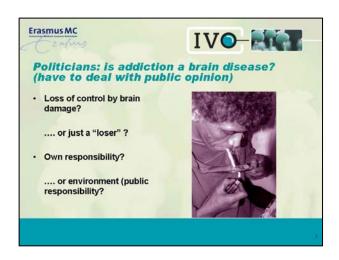


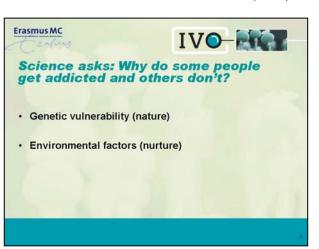


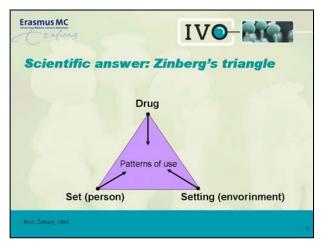


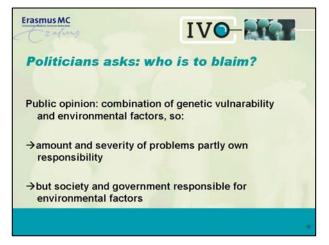










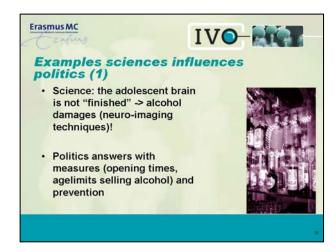


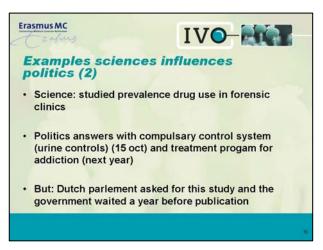






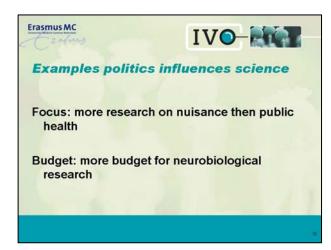


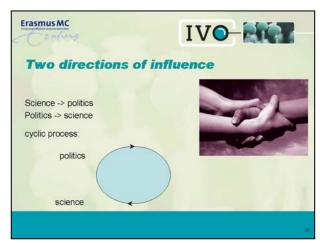
















Presentation from Lidija Vugrinec, coordinator of the Criminal Justice Platform



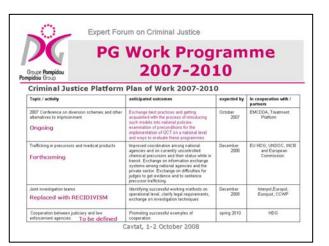
Expert Forum on Criminal Justice

Round Table on

Research and its implications for methods of dealing with drug addiction: the ethical challenges

Lidija Vugrinec

Cavtat, 1-2 October 2008





Expert Forum on Criminal Justice

QCT and other alternatives to imprisonment

- Follow up of the Conference held last October in Bucharest Guidelines on the "quasi-coerced" treatment of adult drugdependent offenders
- Meeting of a working party on the possibility of conducting a survey on best national practices across Europe (Paris, 5 February 2008)
- To provide support for setting up or strengthening national mechanisms
- A draft questionnaire produced and revised after discussion at the VIII CJP meeting
- Disseminated to PCs in April 2008; received replies from 20 PG member states
- Findings to be presented at the IX CJP meeting

Cavtat, 1-2 October 2008



Expert Forum on Criminal Justice

Public awareness with regard QCT and other alternatives to imprisonment

- To promote conclusions of the QCT survey and research report
- Possibly to produce a publication on best European practices in order to raise the awareness among the professionals and especially policy-makers
- To facilitate setting up or strengthening national mechanisms
- To develop good marketing and advertising strategy in order to translate the message to the national levels (possible seminars, conferences...)

Need for co-operation with Treatment and Ethics Platform

Cavtat, 1-2 October 2008



Expert Forum on Criminal Justice

Recidivism

- At the VIII CJP meeting presented Paper on the theory of recidivism prepared by Dr. Butorac (Croatia)
- Latin "recidere" or "iterum cadere" = to fall back, fall again
 legal, criminology and penology definitions (in science related to criminality)
- expansion in recidivism in a state proves failure not only of criminal justice system but probationary and penitentiary systems as well
- success of global policies of crime prevention can be measured by the rate of recidivism
- scale of recidivism is steadily increasing but still varies between 20-60%

Cavtat, 1-2 October 2008



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Recidivism

- available data are not compatible because of differences in criminal laws, court practices and similar
- younger prisoners have much better chance of "falling again" due to the fact that an increase in age leads to a decrease in criminality
- legal determination of recidivism reflects country's law makers attitude towards this phenomenon
- criminal law generally applies specific treatment to recidivists in the form of more serious sentences and security measures (example mandatory psychiatrist treatment or mandatory treatment of addiction)

Cavtat, 1-2 October 2008



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Recidivism

- Criminologi's aspect recidivism is a multi causal phenomenon and it is biologically and psychologically determined. It is a social phenomenon *sui generis* with its own etiology but as such is a part of criminality in general
- Penology views recidivism as a repeated return of a criminal to the penitentiary
- Presentation by Mrs. Stenbaka (Karolinska Institute Stockholm)
 - results of long-term studies on the link between drug use and criminality investigating risk and protective factors; CRIS
 - drug use or criminal activity before the age of 18 was an important risk factor for future criminal activity
 - need to get drug users into treatment through the criminal justice system Cavtat, 1-2 October 2008



Expert Forum on Criminal Justice

Recidivism

- Tour de table on national situations / knowledge
- Participants defined stopping of re-offending as main political goal; strong correlation with the QCT and other alternatives to imprisonment
- In order to better understand relationship between drugs and crime (acquisitive crime in particular), there is need to improve data collection
- More to be invested on research on evaluation methods
- Research to be discussed at the next meeting
- Presentation on findings of a recent Irish study in relation to existing international literature on recidivism

Cavtat, 1-2 October 2008