

Medicinal drugs and traffic safety: European DRUID PROJECT

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ABSTRACT

This article analyses the research background of medicinal drugs and traffic safety within the European Union, with special emphasis on the activities carried out by the Directorate General for Energy and Transport. The European Union funded project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines) is described in terms of its main objectives, work package activities and consortium partners. Special attention is paid to DRUID activities regarding medicinal drugs and driving. Please visit the DRUID home webpage for further details.

Keywords: Accidents, traffic; Automobile driving; Drug evaluation; Drug labelling; Drug packaging; Psychomotor performance

MEDICINAL DRUGS, ILLICIT DRUGS AND DRUG SAFETY: SHOULD WE DEAL WITH THESE TWO GROUPS DIFFERENTLY?

One aspect that is often a cause of controversy is whether or not medicinal/illicit drugs and road safety should be addressed together [1,2].

Medicinal and illicit drugs are two completely different categories of substances: medicines, unlike illegal drugs, are a legal product, whose authorisation is regulated by the competent bodies (within the European Union by the EMEA agency (<http://www.emea.eu.int/>) in London), are prescribed by doctors and sold by pharmacists.

What sometimes causes confusion is that they (medicines and illicit drugs) are sometimes lumped together because, from the point of view of traffic, they have many similarities: i) What is important is not the type of substance but the accident risk. ii) It is sometimes difficult to establish whether the substance had been prescribed or whether the person had been consuming it illegally (benzodiazepines, opiates, etc). iii) The person may frequently be under the effects of several substances at the same time, including alcohol [1,2].

Another issue that has frequently caused some confusion in the past concerns alcohol and other psychoactive substances. The relation between alcohol and driving is well-established. The alcohol model, however, cannot be used for illegal and medicinal drugs, as was clearly pointed out more than 20 years ago [3], basically because, unlike alcohol, most illicit and medicinal drugs do not have a clear relationship with blood plasma levels, impaired psychomotor performance and accident risk.

Finally, while alcohol is only one substance, illicit drugs include various groups of substances with different profiles (depressants, such as inhalants; stimulants such as cocaine; psychedelic drugs, such as LSD), while there is a great variety of medicinal drugs on sale in developed countries. What is more, most medicines have little or no effect on psychomotor performance and/or driving ability [1,2].

At least in my opinion, these two groups of substances (medicinal drugs illicit drugs) should be addressed separately, principally because as just mentioned, medicinal drugs are legal products and are used under the supervision of health professionals (physicians, pharmacist, and nurses), while for illicit drugs the situation is almost the opposite, even though they may overlap in some cases.

However, I agree that, at this time, and looking at the development of health and traffic safety policies, driving under the influence of psychoactive drugs should be addressed as a single issue (while taking into account the existing differences). It is also important to recognize that, according to professionals' backgrounds and fields of work (toxicologist, police, psychologists, etc), different points of view could exist.

As will be commented later on, the DRUID project "is characterised by aiming at the whole class of psychoactive substances, alcohol as well as medicines and drugs" [4].

MEDICINAL DRUGS AND TRAFFIC SAFETY: A EUROPEAN PERSPECTIVE.

The question of medicinal drugs and road safety has been the object of increasing awareness by European Institutions.

Within the European Union, the Directorate General for Energy and Transport (DG TREN) has paid relevant attention to this matter, as it is obviously a question that it is of great concern within the European Union. Relevant information can be obtained from the DG TREN home webpage http://ec.europa.eu/dgs/energy_transport/, and particularly from the transport section home webpage, road safety, behaviour section http://ec.europa.eu/transport/roadsafety/behavior/introduction_en.htm. Of note, in the late 90s, the working group on alcohol, drugs and medicines and driving was constituted.

Among other EU bodies, we should mention the EMCDDA (<http://www.emcdda.europa.eu/>) and EMEA (<http://www.emea.eu.int/>) agencies, which have been involved in the field of medical drugs and driving at different levels. As a pan-European body, it is necessary to mention the Pompidou Group, Council of Europe (http://www.coe.int/T/dg3/Pompidou/Default_en.asp), which has organized several specific conferences on this topic (medicinal drugs/illicit drugs and driving).

Finally, several international scientific societies have addressed over the years this topic, including ICADTS (<http://www.icadts.org/>) and TIAFT (<http://www.tiaft.org/>).

Although these public/private organizations have addressed the topic of medicinal drugs (and illicit drugs) and driving, and have, among other issues, identified research needs and produced recommendations, I would like to focus on the activities carried out by the DG TREN Working Group on Alcohol, Drugs and Medicines and Driving.

THE DG TREN WORKING GROUP ON ALCOHOL, DRUGS AND MEDICINES AND DRIVING

Within the framework of the DG TREN this working group was re-activated in the late 90s. It meets regularly, at least once a year, and includes delegates from the European Union Member States, and delegates for other organizations (currently ICADTS and the Pompidou Group). This working group is chaired by Pr Alain Verstraete.

In 2002, the Report on Drugs, Medicines and Driving [5] was adopted. This document has been used, among other things, as a basis for the identification of research needs within the European Union. Table 1 reproduces the summary of the mentioned report regarding medicinal drugs, which included five key recommendations [5].

EUROPEAN UNION LEGISLATION ON MEDICINAL DRUGS AND DRIVING

From the field of road safety, the recent Legal framework included:

- Commission Recommendation of 17 January 2001 on the maximum permitted blood alcohol content (BAC) for drivers of motorised vehicles.
- Council Resolution of 27 November 2003 on combating the impact of psychoactive substances use on road accidents.
 - Underlines the importance of :
 - Promoting research on the influence of psychoactive substances over driving ability
 - Developing research to improve road tests
 - Ensuring the exchange of information among MS
 - Launching targeted information and prevention campaigns to warn against the dangers of psychoactive substances use in the context of driving
 - Taking any appropriate measures (sanctions,..)
 - Gathering and evaluating information regarding measures for rehabilitation of drivers
- Directive 91/439/CEE on driving licences and in particular its Annex III (minimum standards of physical and mental fitness to drive), §15: “Driving licences shall not be issued to or renewed for applicants or drivers who are dependent on psychoactive substances or who regularly abuse them”. Of note, the 27th of March 2006, the Member States agreed on the new rules for driving licences in Europe, which had initially been proposed by the European Commission in 2003 (COM(2003)621).

For a detailed description of these regulations please visit the section of fitness to drive within the transport home webpage, road safety section (http://ec.europa.eu/transport/roadsafety/behavior/fitness_to_drive_en.htm).

RESEARCH ON PSYCHOACTIVE SUBSTANCES AND DRIVING FUNDED BY THE EUROPEAN UNION.

Table 2 presents a list of the main European Union funded projects dealing with behaviour (http://ec.europa.eu/transport/roadsafety/behavior/projects_en.htm). Recent projects of special relevance to the topic of medicinal drugs and driving are ROSITA (<http://www.rosita.org>) and IMMORTAL (<http://www.immortal.or.at>).

THE DRUID PROJECT: DRIVING UNDER THE INFLUENCE OF DRUGS, ALCOHOL AND MEDICINES.

The Commission launched, in June 2004 (OJ of 29 June 2004, C169/3), a call for proposals in the framework of the 6th Framework Programme: Influence of alcohol, drugs and medicines on driving [6].

The Expected outcomes of the project to be funded are the following [7]:

- Have reference studies of the impact on fitness to drive for alcohol, illicit drugs and medicines.
- According to the substance, to be in a position to refer to a threshold defined for driving a power-driven vehicle.
- To have an evaluation of the best tracking devices allowing a medical and legal monitoring of drivers.
- Be able to position medicines according to a labelling system corresponding to European classification which will have been worked out.
- To be in a position to propose and/or impose rehabilitation schemes to the driver, adapted to its personal situation and having a positive impact on its future perception of the driving task.
- To have defined strategies of driving bans, which are compatible with the road safety objectives and at the same time respect the need for mobility, such as shorter or prolonged withdrawal periods (withdrawal also under condition of a targeted rehabilitation scheme) or definition of restrictions of use of the licence.
- Define the doctors' legal responsibility vis-à-vis dangerous patients consuming psychoactive substances and the role they can play with regard to road safety.
- To be in a position to inform the general public, for both preventive purposes and for intervening with the target group.

The DRUID project has been funded on the basis of that call for proposals. The project started on October 15th, 2006, and will run for 48 months. The DRUID home webpage, where all relevant information can be downloaded is <http://www.druid-project.eu> [4]. Figure 1 present the webpage of the DRUID project, the Editors being Michael Heißing and Martina Albrecht.

The coordinator of the DRUID project is Bast (Federal Highway Research Institute, Bundesanstalt für Straßenwesen, Germany). Any queries to the said project should be addressed to the coordinator Mr Horst Schulze (Schulze@bast.de) or to the DRUID E-mail address: druid@bast.de

DRUID is an Integrated Project (IP, as defined in the 6th Framework Programme). As stated in the DRUID web page [4] “DRUID is characterised by aiming at the whole class of psychoactive substances, alcohol as well as medicines and drugs. Additionally, the interest is to understand all facets of the problem: consumption, impairing effects, accident risk, detection, deterrence, rehabilitation and prevention. This issue is substantially new. Up to now, research studies mainly concentrated on partial problem areas with focussing onto singular substance groups. In consequence, there is a substantial deficit in integrating the different problems and results into one common answer to the question of how traffic safety is affected by psychoactive substances. Combining the knowledge from the different problem areas and their different scientific and practical issues opens the chance of a new approach to reduce the number of victims of traffic accidents”.

The DRUID project involves 37 partners from 19 countries (18 European Union Member States and Norway). The list of institutions involved is presented in Table 3. The DRUID consortium is made up of academic, research, medical and governmental institutions, with a wide range of expertise and clear complementarities between partners.

The DRUID project has been structured in 7 research Work Packages (WP).

WP 1 –Methodology & Research

WP 2 – Epidemiology

WP 3 – Enforcement

WP 4 – Classification

WP 5 – Rehabilitation

WP 6 - Withdrawal

WP 7 – Dissemination & Guidelines

Throughout these 7 WPs, DRUID will [4]:

- Conduct reference studies of the impact on fitness to drive for alcohol, illicit drugs and medicines and give new insights to the real degree of impairment caused by psychoactive substances and their actual impact on road safety,
- Generate recommendations for the definition of analytical and risk thresholds,
- Analyse the prevalence of alcohol and other psychoactive substances in accidents and in general driving, set up a comprehensive and efficient epidemiological database,
- Evaluate "good practice" for detection and training measures for road traffic police allowing a legal monitoring of drivers,
- Establish an appropriate classification system of medicines affecting driving ability, give recommendations for its implementation and create a framework to position medicines according to a labelling system,

- Evaluate the efficiency of strategies of prevention, penalisation and rehabilitation, considering the difficulties of appropriate evaluation strategies for combined substance use and recommend "good practice",
- Define strategies of driving bans, combining the road safety objectives with the individual's need for mobility,
- Define the responsibility of health care professionals for patients consuming psychoactive substances and their impact on road safety, elaborate guidelines and make information available and applicable for all European countries.

As earlier mentioned, DRUID is aiming at the whole class of psychoactive substances, alcohol as well as medicines and drugs. In my opinion, regarding medicinal drugs, and with respect to physicians and pharmacist, the key relevant research activities to be done in each Work Package are:

- Metaanalysis and experimental studies with medicinal drugs within WP 1.
- Prevalence of the presence of medicinal drugs in drivers in traffic in general and those involved in road traffic accidents, as well as pharmacoepidemiological studies based on records of medicinal drugs prescribed/sold within WP 2.
- On-site oral medicinal drug screening (oral fluid and roadside checklist) within WP3.
- Categorisation and labelling on medicinal drugs and driving within WP 4.
- Rehabilitation strategies in connection with medicinal drugs abuse/dependence and drivers in substitution treatment, within WP5.
- Procedures, sanctions, and measures taken regarding withdrawal and renewal in relation to driving while impaired by medicinal drugs within WP 6.
- Development of prescribing and dispensing guidelines, development of information materials, evaluation of practice guidelines and protocols in clinical practice regarding medicinal drugs and driving, within WP7.

In my opinion, for physicians (general practitioners, specialists) and pharmacists, the Work Packages that will have a greater impact in their prescribing and dispensing activities are WP 4 – Classification (please see Table 4) and WP 7 – Dissemination & Guidelines (please see Table 5). The information regarding these two Work Packages that appear in the DRUID home webpage [4] is reproduced on Tables 4 and 5.

The DRUID project will pay special attention to the ethical issues, as well as to dissemination activities. Please visit regularly DRUID home webpage (<http://www.druid-project.eu>) to keep up to date with the progress made within the EU project DRUID:

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Table 1: Summary of the Report on Drugs, Medicines and Driving [5]

Use of impairing medicines and road safety

a) Findings

In addition to illicit drugs, many medicines can also increase crash risk. As medicines are used by a larger percentage of the population, their contribution could be larger. As for illicit drugs, a complete understanding of the problem of medicines and driving will only be achieved in two complementary approaches: experimentation and epidemiology.

Due to their almost identical effects on driver performance, both the consumption of medicines that may impair vehicle-driving ability and the illegal use of drugs result in very similar road safety problems.

Statistics collected by Member States on the prevalence of drugs and medicine in road accidents are still too fragmentary due to the important number of substances concerned and, statistically, are not comparable. They do not give a sufficiently detailed picture of the situation and do not permit identification and evaluation of the most effective possible counter-measures.

In order to base decisions on good scientific information, it is thus necessary to pursue epidemiological surveys in this field in greater detail, and to continue research work. A modification of the juridical environment existing in most Member States is, therefore, a prerequisite to enable statistically large-scale roadside checks to be undertaken. Mandatory testing for the presence of medicines is highly recommended in particular in the event of road accidents that result in deaths or serious injuries.

In contrast with alcohol, it is much more complex to establish a dose concentration-effect relationship. Thus, concentration levels above which driving should be prohibited is still difficult to establish. At present, two options are offered to the legislator. The “zero tolerance” option for illicit drugs, as it is applied in a number of States, such as Germany, Belgium or Sweden. Another option is to evaluate the deterioration of driving aptitude under the influence of drugs (impairment) by specifically trained police officers or medical doctors where required. Both approaches are not mutually exclusive.

A distinction should be made in terms of legislation or regulation between medicinal drugs and illegally used medicinal drugs. Anyhow, driving impaired by medicinal drugs should not be allowed even when those medicines are prescribed.

Moreover, research efforts to develop practical and reliable detection equipment for roadside checking for drugs and medicine should continue. Exchange of information at the EU level in view to identify best practices in the field of police control and training should also be organised on a regular basis.

More specifically, improved information (through specific campaigns or via health professionals like doctors and pharmacists) should be systematically organised to make drivers aware of the dangers of driving whilst under medicinal treatment. A specific

system of labelling like a pictogram should be affixed or printed on packaging of those medicines that will impair the ability of drivers. Medicines need to be categorised in terms of their potential to impair driving, e.g. on the number of categories and their consequences for their use by the different categories of driving licence holders. The efficiency of the various approaches, which exist today at national level, should be evaluated, with the objective of harmonisation

b) Recommendations

To undertake further research to establish the prevalence and role of medicinal drugs in road accidents.

To develop common guidelines about the information given to patients by practitioners and pharmacists.

To inform users with appropriate and harmonised labelling or pictograms on medicine packages.

To implement a Europe-wide classification of medicinal drugs, based on:

- the pharmacological effects of the drugs
- their therapeutic indications

with regard to the different categories of driving licences and the decisions of the medical authorities for driving licences.

To adapt driving licence requirements in order to permit allowances or restrictions for drivers using chronic treatments influencing driving.

Table 2: Projects financed by the Commission about behaviour.

Reproduced from

http://ec.europa.eu/transport/roadsafety/behavior/projects_en.htm. Downloaded March 1st, 2007.

Acronym	Title
<u>CAST</u>	Campaigns and Awareness-raising Strategies in Traffic Safety
<u>EURO-BOB 2004-2005</u>	Pan European Designated Driver Campaign
<u>EURO-RS WEB</u>	A website on awareness raising campaigns in the field of road safety
<u>GADGET</u>	Guarding Automobile Drivers through Guidance Education and Technology
<u>GLARE</u>	Relevance of glare sensitivity and impairment of visual function among European drivers
<u>IMMORTAL</u>	Impaired Motorists, Methods of Roadside Testing and Assessment for Licensing
<u>MEDRIL</u>	Study of medical examination for driving licence holders in 4 EU-MS
<u>NESA</u>	Nuit Européenne Sans Accident
<u>PROMISING</u>	Promotion of mobility and safety of vulnerable road users
<u>QUAVADIS</u>	Quality and Use Aspects of Vehicle Adaptations for Disabled
<u>RED-CROSS 2004-2005</u>	The European Red Cross Road Safety Campaign 2005
<u>RESPER</u>	RESeau PERmis de conduire
<u>ROSE-25</u>	Inventory and Compiling of an European Good Practice guide on road safety education targeted at young people
<u>ROSITA 2</u>	Evaluation of roadside oral fluid drug tests for the detection of drivers under the influence of drugs
<u>TRAINER</u>	System for driver Training and Assessment using Interactive Evaluation tools and Reliable Methodologies
<u>YOUTH ON THE ROAD</u>	Youth on the Road

Table 3: DRUID project: Partners. Reproduced from <http://www.druid-project.eu>. Downloaded March 1st, 2007 [4].

<u>BASt</u> - Bundesanstalt für Straßenwesen (Federal Highway Research Institute), Germany	<u>CDV</u> - Centrum dopravního výzkumu (Transport Research Centre), Czech Republic	<u>CERTH-HIT</u> - Centre for research and technology Hellas, Greece
<u>CPS-NILM</u> - Centre of Post-Graduated Studies in Legal Medicine of the National Institute of Legal Medicine of Portugal	<u>DGT</u> - Dirección General de Tráfico, Spain	<u>DTF</u> - Danish Transport Research Institute, Denmark
<u>FHI</u> - Norwegian Institute of Public Health, Norway	<u>IBSR</u> - L'Institut Belge pour la Sécurité Routière, asbl, Belgium	<u>IES</u> - Institute of Forensic Research, Poland
<u>IFT</u> - Institut für Therapieforschung, Germany	<u>INRETS</u> - National Institute for Transport and Safety Research, France	<u>ITS</u> - Motor Transport Institute, Poland
<u>KfV</u> - Kuratorium für Verkehrssicherheit (Austrian Road Safety Board), Austria	<u>KLPD</u> - Korps Landelijke Politiediensten, Netherlands	<u>KTL</u> - National Public Health Institute, Finland
<u>LMU</u> - Ludwig-Maximilians Universität München, Germany	<u>RUGPha</u> - University of Groningen, Department of Pharmacotherapy and Pharmaceutical Care, Netherlands	<u>RUGPsy</u> - University of Groningen, Department of Psychology, Netherlands
<u>SIPSiVi</u> - Società Italiana di Psicologia della Sicurezza Viaria, Italy	<u>SPV</u> - Svet za preventivo in vzgojo v cestnem prometu Republike Slovenije, Slovenia	<u>SWOV</u> - SWOV Institute for Road Safety Research, Netherlands
<u>TFA-UNPD</u> - U.O.C. Tossicologia Forense e Antidoping-Azienda Ospedaliera-Università di Padova, Italy	<u>TMI</u> - Institute of Forensic Medicine Mykolas Romeris University, Lithuania	<u>TNO</u> - Netherlands Organisation for Applied Scientific Research TNO, Netherlands
<u>TOI</u> - Institute of Transport Economics, Norway	<u>TRC</u> - TÜV Rheinland Consulting GmbH, Germany	<u>UGent</u> - Universiteit Gent, Belgium
<u>UGren</u> - Centre Régional de Pharmacovigilance, France	<u>UKBH</u> - University of Copenhagen, Denmark	<u>UKL-HD</u> - Universitätsklinikum Heidelberg, Germany
<u>UMaas</u> - Maastricht University, Faculty of Psychology, Netherlands	<u>UNICAEN</u> - Université de Caen – Basse Normandie, France	<u>USZ</u> - University of Szeged, Hungary
<u>U. Turku</u> - University of	<u>UVa</u> - Universidad de	<u>UWUERZ</u> - Bayerische

Turku, Finland	Valladolid, Spain	Julius - Maximilians - Universität Würzburg, Germany
<u>VTI</u> - Swedish National Road and Transport Research Institute		

Table 4.

DRUID project: Work Package 4 – Classification. Reproduced from <http://www.druid-project.eu>. Downloaded March 1st, 2007 [4].

Work Package 4 – Classification

Work Package-leader: Javier Alvarez, Universidad de Valladolid, Spain

A large proportion of the population habitually drives while taking medicinal drugs (either in acute or chronic use). While medicinal drugs are not the main factor to be considered when looking at the causes of road traffic accident, their importance is continually growing. In that way, the White Paper "European Transport Policy for 2010: time to decide" aims to reduce the accident mortality rate by 50 % by 2010. To this end, the White Paper addresses the issue of "to combat the scourge of drink-driving and find solutions to the issue of drugs and medicines".

The prescription of medicinal drugs is an everyday factor in clinical practice, and even though safer and more effective medicinal drugs are being commercialized every day, some of them can deteriorate psychomotor performance, which can affect a person's ability to drive safely.

The work package classification will have an output both for physicians/pharmacists and other health professionals, as well as the patients taking these medicinal drugs, by two major actions: categorization of the medicinal drugs on driving ability, and propose appropriate labelling systems regarding medicinal drugs and driving.

This Work package has four objectives:

1. To review of the existing i) classification/categorisation systems and ii) labelling systems regarding medicinal drugs and driving.
2. To propose and agree on the criteria and the methodology on the establishment of a European i) classification/categorisation system and ii) labelling system of medicinal drugs and driving.
3. To develop of a methodology to continuously update the i) classification/categorisation system and ii) labelling system on medicinal drugs and driving.
4. To propose of a classification/categorisation system for the relevant therapeutic groups of medicines available in the market.

For the achievement of these objectives work package 4, has issued three research tasks.

Tasks 4.1, **Review of existing classification efforts**, will focus on the first objective. As a background, this task will use the current Belgian, Spanish and French categorization systems on medicinal drugs and driving. This task will also benefit from the work done by ICADTS and other organizations.

Task 4.2, **The establishment of criteria for a European categorisation, based on expert consensus**, will focus on the second objective of the Work Package, and contribute to the third objective.

With this aim, Task 4.2 will propose a methodology to achieve the criteria for a European categorisation with experts in DG SANCO, DG TREN and EMEA (the EU's

medicinal drug regulatory authorities), experts involved in developing existing categorisation systems and experts from relevant drug manufacturers.

Emphasis will be given to methodologies for assessing impairment, warnings and guidelines for allowing categorisation for individual medicinal drugs and how to maintain the classification system.

A set of criteria will be derived for consensus development as well as the procedures for maintaining the criteria and conditions under which these activities can be embedded for establishing a future framework.

Task 4.3, **Establishment of framework for classification/categorisation and labelling of medicinal drugs and driving**, will focus on the fourth objective of the work package, and contribute to the third objective.

With this aim, Task 4.3, will provide a classification/categorisation system for the relevant therapeutic groups of medicines available in the market, including newly available drugs during the timeframe of the project DRUID.

Furthermore, Task 4.3, based on Task 4.2, will provide a mechanism for modifying the classification, based on new evidence, if necessary.

Table 5.

DRUID project: Work Package 7 – Dissemination & Guidelines. Reproduced from <http://www.druid-project.eu>. Downloaded March 1st, 2007 [4].

Work Package 7 - Dissemination & Guidelines

Work Package-leader: Han de Gier, University of Groningen, Department of Pharmacotherapy and Pharmaceutical Care, Netherlands

The objectives of this work package are to review the state-of-the-art and documented effectiveness of existing campaigns and practice guidelines regarding psychoactive substances focussed on the general public and health care professionals, the development of information materials aimed at the general public and health care professionals and a proposal for improving the procedures for assessing fitness to drive.

Campaigns

A review will be conducted including existing campaigns on prevention of driving under the influence of psychoactive substances. The focus will be on campaigns aimed at the general public (mass media, multimedia, printed media, brochures) and on programs for physicians and pharmacists (continuous education, brochures). This inventory will be completed with examples from other countries such as Australia (for example State of Victoria) and the United States.

In addition to the materials used for the campaigns, information will be sought on the impact of these campaigns (if available), as well as on the design of effective campaigns and how to evaluate their impact. In particular, for continuous education of professionals, the application of new knowledge for safer use of drugs that can impair driving will be explored. Searches of the literature will be extended by consultation of experts through various international organizations (International Council on Alcohol, Drugs and Traffic Safety ICADTS, FERSI, the Pompidou group of the Council of Europe and the Working Group on Alcohol, Drugs, Medicines and Driving from DG TREN).

Guidelines and professional standards

The scope and effectiveness of professional medical and pharmaceutical standards will be discussed with European organisations of physicians and pharmacists. In developing guidelines and protocols for improving prescribing and dispensing practices specific attention will be given to the opportunities of using Information and Communication Technology (ICT) in the computerised information systems that physicians and pharmacists use in their daily practice. In these approaches the role of health care professionals in case psychoactive substances other than medicines will be used by their patients will be addressed.

The existing medical guidelines for assessing fitness to drive within the framework of Council Directive 91/439/EEC (on driving licences) will be evaluated on the basis of legal outcomes in the event of accidents occurring after a positive decision from a physician's side. After reviewing some best practices a proposal for implementing improvements in legislation and procedures will be presented.

Booklets

Various documents and brochures for dissemination of information regarding psychoactive substances and driving will be developed. These documents will be addressed to the general public (regarding medication and driving), drivers as patients (regarding how diseases/medication can affect driving) with special attention to younger drivers (regarding multiple drug use, for example cannabis in combination with alcohol or ecstasy), physicians and pharmacists (counselling the patient-driver regarding medication and driving), and policy makers and other public bodies.

Multimedia support in developing these materials is important as well as the assessment of the impact of the various means of communication.

Evaluation and implementation of new technologies

The implementation of practice guidelines and protocols for medical and pharmaceutical care will be investigated. After a baseline measurement of knowledge and attitudes towards prescribing and dispensing psychoactive medicines to patients who drive among groups of general practitioners, medical specialists and community pharmacists in the Netherlands, Belgium, Spain, and Germany interventions will be evaluated based on a questionnaire survey and focus group discussions. Collaboration with researchers in those countries can provide insight in differences depending upon existing conditions with respect to the application of ICT and working relationships of the different professionals in these countries. After educating health care professionals based on new information, such as a categorization system for medicinal drugs affecting driving performance, guidelines and protocols, as well as brochures for counselling patients, their knowledge and attitudes will be assessed again to show the impact of the intervention.

The availability of new materials for counselling patients will offer opportunities to evaluate the effectiveness of risk communication to patients who use psychotropic medicines and to drug consumers regarding psychoactive substances affecting driving performance. After a baseline measurement of knowledge and attitudes towards driving while using impairing substances among patients and drug users, the effectiveness of new ways to communicate risk to these target groups will be evaluated. Based on a questionnaire survey among patients who receive psychotropic medication in community pharmacies and drug consumers, knowledge and attitudes before and after the introduction of newly developed tools for risk communication will be assessed. By investigating the patient satisfaction in all practices where health care professionals used new tools for counselling their patients the outcomes of the implementation can be further defined.

Figure 1.
DRUID project home webpage. Reproduced from <http://www.druid-project.eu>.
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Welcome to DRUID

The Integrated Project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines) deals with the scourge of drink-driving and is going to find answers to questions concerning the use of drugs or medicines that affect people's ability to drive safely. DRUID will bring together the most experienced organisations and researchers throughout Europe, involving more than 20 European countries. The aim is to gain new insights to the real degree of impairment caused by psychoactive drugs and their actual impact on road safety. All in all this Integrated Project will fill the gaps of knowledge and provide a solid base to generate harmonised, EU-wide regulations for driving under the influence of alcohol, drugs and medicine.

DRUID

The European Integrated Project DRUID is a part of the 6th Framework Programme. It brings together 36 institutes from 18 European countries.
Start: October 15th, 2006
Duration: 48 months.

News

Kick-off-Meeting, 13. - 14. November 2006 in Cologne

Links

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