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The Cologne Import Information System: A Tool to Highlight Long Term Trends in the Black Market for Drugs and Doping Substances

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Abstract
Doping substances are still popular among athletes even at subcompetitive or recreational level. Such substances are not freely available in Germany and a black market is supposed to feed the demand. Our objective was to develop and implement a system to collect data for drugs that are imported into Germany illegally. A central database system was established: Import (German: Einfuhr) Information System (EIS). The system is based on a web server and can be accessed over the Internet. The system was installed in March 2005 at the Cologne Cargo Airport and the Cologne Health Authority. Soon other districts started to use the system too. The information collected comprises product names, ingredients and quantity, native countries of the shipper and the addressee respectively as well as the imports grading assigned by the health authority.

Pilot Study
Communication processes between customs office and the health authorities in Cologne were firstly assayed for the years 1999 and 2000. The manual acquisition of about 1600 reports took four months. Data analysis revealed that 70.5 % of imported products were drugs that in Germany are available only on prescription. Nutritional supplements were imported to the percentage of 19.6 %. To 9.9 % the reports dealt with drugs that were identified as doping agents. Amongst the doping agents the main share were anabolic agents with 48.8 % and stimulants with 43.5 %.
Method of EIS

In order to speed up data acquisition the communication process between the customs office and the health authorities was digitalised and mapped by the so called import information system EIS. With the help of EIS data is acquired and digitalised at the place where it arises, that is in the offices of the communication partners. The system was designed to improve the communication process by formalisation and to shorten response times by digitalisation. Thus the use of EIS is favourable for the communication partners as well as the data analysts. This creates a win-win-situation and guarantees the frequent use of the system.
Insight into EIS

The system archives data related to potentially illegal imports of drugs. This includes the date of arrival, the importers country of origin and whether the import was shipped or brought personally. Furthermore product names, producers and the synonyms and quantities of ingredients are stored. The health authorities add a grading that classifies the imported product as nutritional supplement, as drug or as product to be used in doping.

Results

Acceptance of the System

Initially only one pair of offices used EIS for their communication processes. After two years with several sessions of introduction for potential users five pairs of offices use the system.

Acceleration of data collection

The number of stored communicated affairs increased by 8,8 percent from 2005 to 2006. Compared with the pilot study EIS has improved the method of data collection by about 66%: in 1999 and 2000 about 68 products were acquired for the pilot study on an average per month. With EIS the monthly average of 113 products is recorded.
Increase of recognised doping agents

Preliminary results of data analysis show a doubling percentage of drugs that are identified as doping agents from 2005 to 2006. The overall percentage of recognised doping agents has yet to be analysed. The percentage of 10 arising from the pilot study could not been reached for the following proposed reason: In the pilot study products have been graded by doping experts. Pressing problem for the health authorities is the distinction between nutritional supplement and drug but not whether the drug is a doping agent. So the classification as doping agent is merely an additional service for data analysts that use the system. For reliable results product informations collected with the help of EIS must still be checked by doping experts.

Compendium of graded products

The system yields a compendium of products that have already been graded which can be provided to the community of health authorities. This helps to synchronise grading in the future. A printed version of this product list is passed on to authorities that do not use EIS for certain reasons. Discussions about the public supplies of drugs can base on this compendium because frequent imports of specific drugs can point out a supply shortfall.

Conclusion and Outlook

A system to gather data of illegally imported drugs was installed. The speed of collection is still increasing and permits a broader look at a section of the black market. Annual data interpretation can reveal trends regarding the use of drugs. More offices in Germany will be connected to the system in the future. EIS can map any drug import communication process between at least one customs office or police department and one health authority. Thus it could even be used within other countries.