# Counterfeit Medicines The (Unknown?) Threat with many Faces

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Panel: Actual Risk vs. Felt Security – Cases and Conclusions

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# More people were killed by counterfeit medicines than by terrorist incidents in the last 40 years

 Terror > 65.000
 "Over the last 40 years, more than 65,000 people have been killed or injured in transnational terrorist incidents,

Counterfeit medicines: n \* 10.000 – n \* 100.000 p.a.

while estimates of deaths caused by fake medicines range from tens of thousands to hundreds of thousands annually. In China, almost 200,000 individuals died in a single year from fake medicines":

Ronald K. Noble, INTERPOL Secretary General, Opening Remarks IPC workshop Nairobi, 2008

### Awareness?

- Third World
- Europe
- Organized crime
  - Perfect structures, well trained specialists...
  - Big business:
  - Up to 75 billion US dollars by 2010
  - → an increase of more than 90 per cent in just five years
- Low risk of detection high proportion of unreported cases
  - medical doctors, health authorities,

#### What are counterfeit medicines?

- The definition of the WHO:
- Counterfeit medicines are medicines that are deliberately and fraudulently mislabelled with respect to identity and/or source.
- Counterfeit medicines may include products with
  - the correct ingredients
  - or with the wrong ingredients,
  - without active ingredients,
  - with insufficient or
  - too much active ingredient,
  - or with fake packaging.
- Use of counterfeit medicines can result in treatment failure or even death.
- Public confidence in health-delivery systems may be eroded following use and/or detection of counterfeit medicines.
- Both branded and generic products are subject to counterfeiting.
- All kinds of medicines have been counterfeited, from medicines for the treatment of life-threatening conditions to inexpensive generic versions of painkillers and antihistamines

# the Heparine Case... a problem of lacking awareness? ...where safety meets security...

- FDA: 81 deaths related with heparine in 2007/8 in US
- Whereas reports from the EU have mentioned only three side-effects and no deaths,
  - the EU could have been equally affected

#### Counterfeit cases:

#### exerpt from the EU COM SEC(2008) 27674

• Please refer to the document of the EU Parliament <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2008:2674:FIN:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2008:2674:FIN:EN:PDF</a>

Have a look on the table of page 12:

"Counterfeit medicines: Examples of cases reported in 2006/07, potential threats and players involved"

and have also a look on the pie chart of page 1 of the WHO document: http://apps.who.int/medicinedocs/pdf/s4921e/s4921e.pdf

and see the big range of counterfeit medicines including block busters as well as hormones....

### Potential sources of counterfeit products in the LEGAL SUPPLY CHAIN

from EU COM SEC(2008) 27674

- Please refer to the schemes of
- the infiltration of the legal supply chain
- and the complexity of the distritubition chain
- on page 18 of the document of the EU parliament:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2008:2674:FIN:EN:PDF

### The problem of grey and re-imports

- a problem:
- Capping of selling prices for pharmaceuticals and
- no cap of selling prices for pharmaceuticals
  - → increases the rate of (cheaper) re-imports from countries with a cap on selling prices
  - → increases the probability of infiltration with counterfeit products into the legal supply chain

- Should be scrutinized
  - re-import by regulation in Germany:
  - according § 129 para. 2 SGB V
  - within a framework agreement pharmacists are obliged to fulfill an import quota of 5% for cheap pharmaceuticals by e.g. internet sales

### Which countermeasures existwhat should be done?

- EU initiatives
- EU Call: Tackling counterfeit medicines and related criminal networks
- The so-called wholesalers
- EFPIA-study in Shweden
- DIN & ISO/ TC 247 project "Fraud countermeasures and controls"
- EHIBCC & DIN: Unique ID Mark DoD&NATO
- Public Awareness Campagnes: Sweden, Germany





### Counterfeit medicine: a crime with multiple causes – there never will be one and only single technical measure to cover all aspects for all times

- Any protection (technical countermeasure) causes only a delay in time
- → Our holistic approach from University of Hamburg for a sustainable success:
- Short term mid term long term measures

by

- Prevention/Protection Verification Criminological Research/Public Awareness
- Short term: Increasing Public Awareness
- Mid-term: Prevention by adequate authentification system
  - high level parameters and diagnostics
- Verification: by means of automatic identification + data base access
   e.g. UIM-Datamatrix & measureable physical criteria
   technical developments for the interface pharmacy/patient
- Deterrence: field measurements
- Mid long term: technological developments for customs, wholesalers
- and legal Aspects

#### interesting to read:

- COMMISSION STAFF WORKING DOCUMENT. SEC(2008) 2674

  Accompanying document to the: Proposal for a

  DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
- Counterfeit medicines; Survey report: © Council of Europe, January 2006; ISBN 92-871-5863-0,
- WHO /EDM/ QSM/ 99.1 : Counterfeit drugs (Guidelines for combat)
- WHO/EDM/2003.2: Effective medicines regulation: ensuring safety, efficacy and quality
- "Fälschung auf Rezept": Der Spiegel, 30/2003
- Europaweiter Versandhandel mit gefälschten Lifestyle-Pillen from "Die Kriminalpolizei", Dezember 2007: www.kriminalpolizei.de/articles,europaweiter\_versandhandel\_mit\_gefa elschten\_lifestylepillen,1,171.htm

## Thank you for your kind attention!

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