41st EAPCCT Congress | 25-28 May 2021

Virtual Meeting

Live and On-Demand Sessions | Posters | Voting Tools | Chat Rooms

...and a lot more!
Web Monitoring Tools to Monitor Trends in Prescription Medicine Misuse

Richard C. Dart, MD, PhD

Executive Director, Rocky Mountain Poison and Drug Center
and Researched Abuse, Diversión and Addiction Related Surveillance (RADARS®) System
Denver Health and Hospital Authority

Professor of Emergency Medicine, University of Colorado
Denver, Colorado
Competing Interests
RADARS® System is supported by subscriptions from pharmaceutical manufacturers, government and nongovernment agencies for surveillance, research and reporting services.

RADARS System is the property of The Denver Health and Hospital Authority (DHHA), a political subdivision of the State of Colorado. No subscriber participated in the conception, analysis, drafting, or review of this presentation.
Triangulation
More reliable answers by integrating results from several different approaches, each with different and unrelated key sources of potential bias.
World wide web vs internet - what's the difference?

11 Mar 2019

Most of us use the words web and internet to mean the same thing but they're actually quite different.

The world wide web, or web for short, are the pages you see when you're at a device and you're online.

But the internet is the network of connected computers that the web works on, as well as what emails and files travel across.

Think of the internet as the roads that connect towns and cities together. The world wide web contains the things you see on the roads like houses and shops.

And the vehicles are the data moving around - some go between websites and others will be transferring your emails or files across the internet, separately from the web.
The Web as a Research Tool

• Web as recruitment method
  • StreetRx

• Web as communication method
  • Survey of Nonmedical Use of Prescription Drugs

• Web as a data lode for mining
  • Surface Web
  • Deep Web
  • Dark Web
StreetRx France, Germany, Spain, Italy, UK
StreetRx: Canadian Product for Sale in the US
Web as a Communication Tool

• Nonmedical Use of Prescription Drugs (NMURx)
  • Web-based survey of 60,000 people per year
• Non-medical use of prescription and over-the-counter medications.
  • Use in past year, 90 days, month, or week, reasons for non-medical use
  • Routes of administration for non-medical use,
  • Sources of the drug misused
  • Street price paid if the product was obtained through illicit channels.

• Validated tool

Prevalence and Use of BDZ and GABA Analogues in Europe

- NMURx
  - Web-based survey
  - FR, DE, ES, IT, SP, UK
  - 10K – 15K respondents per country

Web as a Data Lode

- **Surface Web** | 5%
- **Deep Web**
  - Research
  - Legal
  - Financial | 95%
- **Dark Web**
The Dark Web

• Not accessible except through special servers

• Two primary categories of data
  • Discussion boards - Similar to surface web content and not particularly unique
  • Cryptomarkets
    • Legal and illegal drug products
      • Counterfeit goods
    • Weapons, hacking sites, pornographic sites, and resources for bitcoin tumbling...

• Content of discussion board posts similar to surface to web
Dark Web Cryptomarket Analysis

• Information
  • Source country, countries shipped to, products, dose, formulation, seller user handle, name of market, price
  • Seller is often post misleading information

• Benefits
  • Unique data source for describing the black-market trade of prescription and illicit drugs

• Limitations
  • Cryptomarket data is unstructured
  • Difficult to extract drug-specific content without manual review
Summary

• The Web: A important tool that provides unique qualitative data, not a purpose in itself
  • Research question first, then tool selection
• Also very useful for recruitment and communication of research subjects
  • www.StreetRx.com
  • NMURx
• One perspective, not the final answer – part of triangulation
Questions?

Richard.Dart@rmpds.org