The new WHO global injection safety policy and campaign

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WHO/USAID/PEPFAR hosted webinar
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Overuse of injections and unsafe injection practices worldwide in 2000 (1)

- Injections worldwide - **16 billion/year**
- 6.6 billion (39.6%) were given with reused equipment (up to 70% in some countries)
- Over **70%** of injections are unnecessary in some regions
- Unsafe injection practices, annually
  - 21 million hepatitis B infections (30% of new cases)
  - 2 million hepatitis C infections (41% of new cases)
  - 260,000 HIV/AIDS infections (9% of new cases)
Overuse of injections and unsafe injection practices worldwide in 2000 (2)

- 3 million accidental needle-stick injuries (2003) leading to:
  - 37% of all new HBV cases in HCWs
  - 39% of new HCV cases
  - 5.5% of new HIV cases

- Every year unsafe injections cause 1.3 million early deaths, a loss of 26 million years of life, and direct medical costs of 535 million US dollars
2010 estimates

- Proportion of **re-use of injection devices**: 5.5%

- **Infections through unsafe injection practices**:
  - 1,679,745 hepatitis B infections
  - Up to 315,120 hepatitis C infections
  - Up to 33,877 HIV infections
Egypt

- Highest prevalence of viral hepatitis in the world
- HCV in 9% of 15-59 yop and in >25% of 50-60 yop
- >150 000 new hepatitis infections every year
- 281 mio injections every year
- 6.8 estimated average number of injections per person per year
- 8% of these injections (~23 million injections) are considered unsafe

India

- 4.8 billion injections per year (25-30% of the 16 billion injections)
- 2.9 (95% CI: 2.8-3.2) injections per person per year
- 82.5% for curative purposes (common symptoms that can be easily treated with oral formulations)
- 62.9% (i.e. 1.9 billion injections) are considered unsafe

Demographic and Health Survey 2008.
IPEN Study Group. Injection practices in India.
WHO/UNICEF/UNFPA joint statement on the use of AD syringes for immunization services

- **Policy on Injection Safety**

  All countries should use only Auto-Disable (AD) syringes for immunization injections (**WHO & UNICEF in favor of AD mechanisms triggered at the start of injection**)

- **Bundling Policy**

  Ensure sufficient numbers of AD syringes, reuse prevention reconstitution syringes and Safety boxes for each vaccine dose

- **Reconstitution syringes**

  UNICEF supplies only syringes with re-use prevention features

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http://www.who.int/injection_safety/en/
Use of injections worldwide

16.7+ billion/year

Immunization injections
5% to 10%

Therapeutic injections
90 to 95%

World Health Organization
Learning from others…
Making Medical Injections Safer (MMIS)

• 2004 – 2010
• Part of the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR)
  ➢ Focus on 11 countries with high HIV prevalence
  ➢ To reduce risk of disease transmission (HIV, HBV, HCV)
• Main objective: to decrease unsafe Injections (rapid interventions focusing on curative injections)
• Funders: CDC and USAID
• Organizations involved:
  ➢ John Snow Institute
  ➢ Other subcontractors (PATH, CDC, etc)
• Focus on collaborating with host nations for sustainability

To reduce:

- Reuse of injection equipment
- Accidental needle-stick injuries
- Overuse of injections
- Unsafe sharps waste

To ensure:

- Rational use of injectable drugs
- Sufficient supply availability

New policy 2015

Exclusive use by 2020

http://www.who.int/injection_safety/en/
Re-use prevention / Sharp Injury Prevention Features (RUP, RUP + SIP)

Costs

- Standard disposable syringes: $0.03-0.04
- AD syringes: $0.04-0.06
- RUP syringes: $0.05-0.08
- SIP syringes: $0.13 – 0.24
- RUP + SIP: $0.09 -0.39
New WHO Policy: Key Elements

- Transition to AD/RUP/SIP devices for both immunization and therapeutic injections
- Develop standards for rational use and supply of standard disposable syringes where they remain necessary
- Call to partners to fund procurement of safety engineered injection devices in all projects
- Call to industry to switch to "safe" syringes
- Call to countries to develop national policies and implementation strategies, with special focus on curative settings
Cost-effectiveness modeling

✓ Multiple studies have been conducted:
  • WHO Modeling based on the year 2000 cohort (Dziekan G et al. 2003)
  • PATH, SIP study in South Africa
  • Unpublished literature from MMIS partners
  • Pending study from WHO consultants

✓ New study preliminary results:
  • Assessed all costs of injection safety, including safety engineered devices, training and HCWM
  • Shows clear cost effectiveness compared to the burden of transmitting and treating diseases
  • For every I$ invested, there is potential for up to I$14 dollars saved
New global campaign

Multimodal

Collective Effort

World Health Organization
Key features for advocacy and global campaigning plans

- Political commitment
- Communication strategy and WHO global injection safety initiative branding
- International donors' engagement strategy
- Industry engagement strategy
- Other stakeholders’ engagement strategy
- Emphasis on health-care workers’ safety, education and training
- Public awareness-raising and patient education and involvement
- Evaluation plan and indicators
Political commitment

- Policy adoption & adaptation at country level
- Implementation strategy and country campaign
- Formal engagement by MS through signature of a document pledging countries’ engagement in the campaign

Clean Care is Safer Care Example:
136 MS signed a pledge to prevent HAIs, including through hand hygiene promotion

http://www.who.int/gpsc/en/
Communication strategy & branding

Countries with health-care facilities registered for SAVE LIVES: Clean Your Hands global campaign

New IS global campaign symbol
Key stakeholders’ engagement

• global policy makers
• international donors
• ministries of health
• country governments
• regulatory agencies
• NGOs
• industry umbrella organizations
• private sector suppliers
• universities & academic institutions
• professional associations
• private sector suppliers
• patient organizations and civil society groups
• others…. 
Donors’ and stakeholders’ engagement

- **All stakeholders:** recommendation for transition to the exclusive use of WHO prequalified RUP/SIP devices in all countries by 2020

- Urging donor agencies to fund only procurement of safety engineered injection devices

- Recommendation to finance appropriate quantities of safety engineered injection devices, single dose diluents, safety boxes and the cost of sharps waste management

- Seeking financial support for sustaining the global scope of this new WHO campaign
Policy Implementation: Industry

- Support clients by transitioning to quality assured AD/RUP/SIP products
- Working with WHO, promote greater accessibility to safe syringes
- Leverage marketing channels to educate
- Ensure affordability of quality devices
Industry engagement

**WHAT**

- Strongly encouraging to switch to or increase safety engineered injection devices production and transfer technology as soon as possible, and to seek PQS prequalification

- Associating PQS prequalified or equivalent products with the WHO global IS initiative branding

**HOW**

- Mapping all RUP and SIP technologies currently available

- Developing demand forecasts

- Building a business case for manufacturers to switch from standard disposable to RUP/SIP manufacturing

- Formal collaboration platform with umbrella organizations of injection devices manufacturers
  - To motivate them to develop or expand the production of safety engineered injection devices
  - To facilitate procurement in countries
  - To reduce device costs as much as possible
A collaborative that aims to promote and support global patient safety, facilitated by WHO

‘To establish a transparent WHO:industry collaborative drawing on corporate social responsibility, avoiding a focus on the potential for commercial gain and aimed at preventing avoidable infections to the benefit of patients in all countries of the world’

http://www.who.int/gpsc/pops/en/
Cognitive Dissonance and Overuse of Injections

Providers

Providers’ perception that patients prefer injections

5-20% of patients preferring injections

Providers’ perception that provider prefer injections

Patients’ perception that provider prefer injections

80-95% of patients not preferring injections

Demand

Prescription
Healthcare workers’ safety, education and training

**WHY – reuse and excessive use still major issues**

- Injections given by non HCWs
- Medical waste scavenging and recycling
- Belief of a better efficacy
- Financial incentives
- Post-training increased user’s acceptability

**HOW – to achieve the change in practices**

- Policy
- Branding and targeted communications (sense of ownership)
- Implementation strategies & tools
- Behavioural change approaches
- New educational tools
- Equivalent oral drugs lists
The Seven Steps of a Safe Injection

A safe injection does not harm the recipient, does not expose the provider to any avoidable risk, and does not result in any waste that is dangerous for other people.

1- Clean work space
2- Hand hygiene
3- Sterile safety engineered equipment
4- Sterile vial of medication and diluent
5- Skin cleaning
6- Appropriate collection of sharps
7- Appropriate waste management
Public awareness-raising and patient education and involvement

**WHY – lack of awareness and patient’s beliefs:**

- injections are stronger medications
- injections work faster
- injection pain is a marker of efficacy
- a drug is more efficient when entering the body directly
- injections represent a more developed technology

**HOW – to raise awareness**

- Raising awareness about safety in injection administration and reducing the demand for injections by patient
- Targeted messages within the communication campaign
- Specific educational materials
- Patient champions
- Using existing international networks

The Seven Steps of a Safe Injection

A safe injection does not harm the recipient, does not expose the provider to any avoidable risk, and does not result in any waste that is dangerous for other people.

1. Patient demand of safe injection
2. Clean work space
3. Hand hygiene
4. Sterile safety engineered equipment
5. Sterile vial of medication and diluent
6. Skin cleaning
7. Appropriate collection of sharps
8. Appropriate waste management
Please join us to launch and sustain the new global injection safety campaign!!!
Thank you for your attention
For more information

- **Contact information**
  
  WHO PATIENT SAFETY PROGRAMME

  patient.safety@who.int

- **Web sites**


  [http://www.who.int/gpsc/5may/EN_PSP_GPSC1_5May_2013/en/](http://www.who.int/gpsc/5may/EN_PSP_GPSC1_5May_2013/en/)