Update on Injection Safety Pilot
Countries: Uganda and India

Arshad Altaf, MBBS MPH
IPC/SDS
# Background

<table>
<thead>
<tr>
<th>2000 estimates (Ref 1)</th>
<th>2010 estimates (Ref 2,3)</th>
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</thead>
<tbody>
<tr>
<td>Global burden of unsafe injections 39.5%</td>
<td>Global burden of unsafe injections 5.5%</td>
</tr>
<tr>
<td>21 million HBV infections</td>
<td>1.67 million HBV infections</td>
</tr>
<tr>
<td>2 million HCV infections</td>
<td>Upto 315,120 HCV infections</td>
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<tr>
<td>260,000 HIV infections</td>
<td>Upto 33,877 HIV infections</td>
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- Injection practices and unsafe injection associated infections have improved
- Challenges remain because of issues with 1) prescribers, 2) providers and 3) patients—*all three are the drivers of unsafe injection practices*
- WHO has initiated pilots in different countries

References:

Elimination without prevention is not achievable.

Unsafe injections have been repeatedly reported from 7 out of 11 countries that carry 50% global burden of hepatitis.

Eliminating unnecessary injections has to be one of the highest priority towards preventing injection associated infections.
**WHO guideline** on the use of safety-engineered syringes for intramuscular, intradermal and subcutaneous injections in health care settings

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**Table 3. Description and sample images of safety features**

- **Category:** AD syringes for immunization & RUP syringes for therapeutic injections
- **Description:**
  - **AD features:**
    - **Safety tab:** Once triggered, the safety tab is exposed, preventing accidental needle sticks.
    - **Safety button:** By pressing the safety button, the syringe is rendered safe, ensuring the needle remains retracted.
  - **RUP features:**
    - **Safety lock:** This feature prevents the needle from being re-activated once triggered.
    - **Safety shield:** The shield covers the needle, protecting the user and others from needle exposure.

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**GET THE POINT**

MAKE SMART INJECTION CHOICES
2015 WHO Policy: Key Elements

- Transition to **RUP/SIP syringes for** therapeutic injections by 2020
- 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 "safety engineered syringes"
- Call to countries to develop national policies and implementation strategies, with special focus on curative settings
Pilot testing

- To demonstrate the feasibility of the campaign and policy at national/local level
- To provide impact data on key indicators (e.g. N° inj/pers/y; % unsafe injections)
- To evaluate success factors and barriers to technology & behavioural change
- Overall: to provide successful examples and lessons learned for countries
Key components of the intervention

1. Rapid review of available information
2. Political commitment and stakeholder engagement – local policy
3. Baseline assessment of injection practices
4. Procurement and continuous availability of products
5. Device introduction, industry engagement
6. Health care waste management
7. Awareness campaign for patients and communities
8. Training
9. Monitoring and evaluation
Achievements-Uganda

- MOH providing leadership and steering activities
- Baseline assessment has provided latest information after 7 years-useful to guide updating of national policy and guidelines
- National training curriculum for injection safety training is being updated and will be used for all future in-service trainings
- Health care waste management guidelines revised and drafted in Oct 2017
Baseline assessment overview

- To determine unsafe injection practices that may lead to infections and estimate proportion of health facilities where procedures are unsafe

- **Approach:** Assessment was based on WHO Revised Tool C

- **Study design:** A cross-sectional observational study design employing both quantitative and qualitative data collection methods; Jan-Feb 2017

- 192 facilities randomly selected in 31 districts (out of 112)
  - 100 public; 92 private

- Facilities categorized into levels
Key findings

- Evidence of attempted sterilization of disposable equipment 0%
- No loose disposable injection equipment outside of packaging in 77.1% facilities
- No multi dose vials with needles left in diaphragm 91.7%
- Job aides and reminders available at 35.4%
- Average number of injections per person per year 3.3 (SD-5.1)
## Difference between public and private facilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Public facility (n=100)</th>
<th>Private facilities (n=92)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clients sometimes brought their own injection devices</td>
<td>30%</td>
<td>6.5%</td>
<td>Could be related to: 1) Stock outs at public facilities 2) Private facilities charge for devices and discourage patients to bring their own devices</td>
</tr>
<tr>
<td>Supervisor reported periods of stock outs of disposable injection equipment</td>
<td>47%</td>
<td>77.2%</td>
<td>Public facilities have inflexible system for emergency orders</td>
</tr>
<tr>
<td>Provider interviewed had received injection safety training in the past two years</td>
<td>31%</td>
<td>39.1%</td>
<td></td>
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</table>
Key findings from procurement and supply management assessment

- Key informant interviews
  - Distributors, importers
  - Regulatory bodies representatives

- Limited suppliers available

- Frequent stock outs at both public and private facilities

- Awareness about devices high but lack of skills on usage

- Issues with quality of product reported by frontline health workers
  - Plunger getting stuck
  - Leakage from the barrel
INDIA
Achievement-India

- MOHFW at Central and State level engaged in all activities
- Baseline assessment to be started
- Community based KAP study on injections completed
- Government of Punjab ready to introduce RUPs in their health system, procurement process to start
- 40 Model Injection Safety Centres to be established at district level hospitals, medical and nursing institutes in Punjab
  - Will serve as resource and training centres for RUPs for health workers
Findings from KAP study

• Between June-July a knowledge, attitude and behaviors (KAP) study completed
  – Household survey of 2400 study participants
  – Observational study in public and private health facilities
  – 16 FGDs in rural and urban areas

• 51% study participants preferred to go to private practitioners; 44% had received education up to 10th grade

• 47% study participants reported only receiving an injection for their health problem in the last three months

• 24% health facilities had a pierced needle left in the diaphragm of a multidose vial

• 31% health facilities had loose needles and syringes observed inside injection giving area
Lessons learned

1. Progress will happen

2. Advocacy needs to be strategic (data based, engaging the right stakeholders/authorities)

3. Working with Ministries require patience as decisions are often slow

4. Preparation for possible deviation
TOOLS/IEC MATERIAL FOR GLOBAL USE
Educational tools for health care workers

HOW CAN AN INJECTION BE UNSAFE?

An injection goes into the body. If the needle is not clean, used or contaminated with infected blood or body fluids, it can spread disease from one person to another. If you are injected with a syringe that has been used on another person, there is a real risk you may become infected.

THE CONSEQUENCES OF UNSAFE INJECTIONS

Hepatitis B

Around 240 million people in the world have hepatitis B, and 8-16 million of these infections are caused by unsafe injections.

Hepatitis C

Unsafe injections are one of the most common causes of hepatitis C. As many as 150-160 million people globally are infected with.

SYMPTOMS OF ACUTE

MAKING SAFE INJECTION CHOICES

When did you last have an injection? Within the last week, month, or year? The chances are that it won't have been so long ago because injections are in common use.

In many cases, injections can be replaced by medicines that you take by mouth, which are much safer for you, and just as effective. It is important to make smart injection choices for yourself, and your children.

MAKE SMART INJECTION CHOICES

BEST INJECTION PRACTICES GUIDELINES

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.

USE STERILE INJECTION EQUIPMENT

Always use a sterile syringe and needle from one, undamaged packaging.

- For each injection, and to reconstitute each unit of medication.
- Prevent contamination of the vials. Keep the syringe and needle separate, and avoid cross-contamination.
- Use the syringe with a sterile needle every time it is used.

SELECT LOW-COST, LOW-OCCURRENCE PROCEDURES

- Using an arm that requires a needle to open, protect fingers with a clean barrier skin protection when opening.

PREVENT CONTAMINATION OF INJECTION EQUIPMENT AND MEDICATION

- Always follow product-specific recommendations for safe storage and handling.
- Prevent cross-contamination:
  - Prepare each injection in a clean, designated area.
  - Do not use any medications or syringes contaminated with... (further information).

USE WHO-RECOMMENDED SYRINGES

WHO recommends syringes with a needle-guarding device for all injections. RJP syringes are safe and provide protection that features are highly recommended whenever possible.
Awareness raising & educational tools for patients and the community

**Make Smart Injection Choices**
Avoid unnecessary injections

**Unsafe Injections Transmit Harmful Infections!**

**Danger!** Needles and syringes are not toys!

Prevention is the best medicine: use antiseptic or alcohol swabs for injection sites.
Infographic for patients and the community

MAKE YOUR INJECTION A SAFE INJECTION

DID YOU KNOW?
An unsafe injection could put you at risk of getting a life-threatening infection such as:

- 30% HEPATITIS B
- 3% HEPATITIS C
- 0.3% HIV

Estimated risk of getting these infections from a contaminated syringe or needle.

WHAT MAKES AN INJECTION UNSAFE?

1. Re-use of syringes and needles, and other injection equipment.
2. Overuse of injections for illnesses where medicines by mouth are available and recommended.
3. Lack of clean work spaces and hands.
4. Unsafe collection and disposal of used injection equipment.

WHO IS AT RISK?

- PATIENTS who receive unsafe injections.
- CHILDREN IN THE COMMUNITY who play near areas where syringes and needles have been thrown away.
- HEALTH CARE WORKERS who get injured by used needles.

DO YOU REALLY NEED AN INJECTION?

How to make smart injection choices

WHAT YOU CAN DO AS A PATIENT

1. Ask if a medicine taken by mouth is available. These can work as well as injections.

WHAT YOU CAN DO AS A HEALTH CARE WORKER

1. Offer your patient a medicine that can be taken by mouth, if available.

2. If you do need an injection, ask for a smart syringe as they can be used once only. Check that the syringe and needle package is new, sealed and undamaged.

3. Make sure your skin is disinfected before the injection.

4. Clean the area where the injection is being given and perform hand hygiene before giving the injection.

5. Use smart syringes that can be used once only. Open the package in front of your patient to reassure them that the syringe and needle have not been used before.

6. Talk to your children and community about the dangers of picking up used syringes and needles.

7. Place the needle, syringe and single-use vial in a safety sharps box as soon as they have been used.

Make smart injection choices and help avoid the risk of infection from an unsafe injection.

For more information visit: www.who.int/injection_safety

World Health Organization
Animation video for patients

Unsafe injections spread deadly diseases

If you need an injection, check that it’s given with a new syringe and needle that can be used once only.

We all have a part to play in making injections safe.
Awareness raising & advocacy leaflets for different audiences
WHO’S WORK WITH NON STATE PARTNERS
Private Organizations for Patient Safety
Injection Safety

POPS Injection Safety provides a unique opportunity to look beyond the regular stakeholders and advocates, to work with "non-state actors" where appropriate in line with FENGA guidelines. It follows the successful model of POPS Hand Hygiene which was created in 2012 and comprised industry representatives whose businesses, as well as corporate social responsibilities, focus on supporting the global agenda of preventing harm resulting from unsafe health care practices.

The aim of the POPS Injection Safety Initiative is to develop and maintain a protected web-based platform to allow interactions between private sector/industry stakeholders, such as companies that develop, manufacture and/or distribute safety-engineered injection devices or components thereof, and WHO. The purpose is to establish a coherent means of communicating and sharing information, in line with WHO recommendations, as well as through projects to enhance the availability and accessibility of safe injection products across the world.

Announcements:

Launch of the POPS Injection Safety platform

Related links:

POPS for Injection Safety

POPS media library

Copyright WHO
Thank you for your attention

http://www.who.int/infection-prevention/tools/injections/en/

Infection prevention and control

Injection safety

Injections are among the most common health care procedures. Every year at least 16 billion injections are administered worldwide with approximately 90% given in curative care. But in some countries, up to 70% of the injections given are unnecessary and are furthermore administered in an unsafe way, by reusing syringes and needles. This causes the transmission of bloodborne viruses. The WHO injection safety campaign called Get the point – Make smart injection choices, aims to make injection practices safer for patients, health workers and the community.

Read more about injection safety.