Injection Safety Project in Egypt

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Overview

• Desk review

• National Injection Safety practice assessment

• Key Performance Indicator

• What is next?
Summarizing the available information about injection use and its determinants in Egypt

The main sources of data included were PubMed (Midline) and Google search databases
- 19 publications were from year 2000 to 2010 and 32 publications from 2010 to 2015.
- All publication were cited in international journals except 7 publications cited in Egyptian journals.

Standard questionnaire used to abstract data on:
- In what proportion do injections contribute to the transmission of hepatitis in Egypt?
- Overview on injections regarding frequency, injection prescribers and providers
- Assess the safety of injections all through Egypt for patients, healthcare workers and the environment by site, healthcare sector and procedure.
- How frequent do reuse of needles and syringes occur?
- How frequent do needle stick injuries occur?
- Are sharps disposed of safely?
Studies in Different Geographical areas of Egypt
No national evaluation of injections and injection related activities in both governmental and non-governmental healthcare sectors published since year 2000 apart from published studies in selected areas;

- Multi-dose vials for more than one patient, changing the needle but not the syringe to withdraw several doses leading to the contamination of the vial;

- Reuse of needles and syringes reported by around 20-23% of individuals, recapping that reach 71% of reported NSIs, unsafe disposal with needle bending in 23%;

- Injections contribute as a risk factor of transmission of hepatitis in Egypt; supported by mathematical model which concluded that HCV is self-sustained and unsafe injections played an essential role in its transmission;

- High frequency of injection per Egyptian citizen that reach 6.8 per year;

- Low rates of HBV vaccination in HCWs ranged from 60% in medical staff to 3.5% of housekeepers
National Injection Safety practice assessment

Objectives

• Assessing the magnitude of injection safety problem:
  • Health care facilities (governmental / Private)
  • Informal health providers
  • Community

• Identifying the gaps in injection practices in Egypt

• Identifying relevant monitoring and evaluation for improvement of injection safety project in Egypt
Overview of Methodology for Baseline Assessment

- Cross sectional study at 8 different governorates
- Modified tools from Tools C

- Facilities to target
  - Primary care settings (dispensaries and clinics)
  - Secondary level facilities
  - Other health services

- Household survey

- Focus group discussions
  - Physicians
  - Nurses
Methodology

- Frontier
- Urban
- Lower Egypt
- Upper Egypt
Number of health facilities / Number of observations

- Injections at Emergency Department: 77
- In-patient wards: 39
- Phlebotomies: 75
- Family Planning: 39
- Vaccination office: 40

- MoHP hospitals: 16
- Private Hospitals: 15
- University Hospitals: 6
- PHCs: 48
- Community (private) pharmacies: 48
Household survey

- **Households**: 2257
- **Interviewees**: 8326
- **Family members**: 10223

**Gender Distribution**
- **Male**: 44%
- **Female**: 56%

**Urban vs. Rural**
- **Urban**: 83%
- **Rural**: 17%
National Assessment- Key findings

- All health care facilities either governmental or private applied the protocol of MoHP and syringes were not given to the patients after use;
- In all MoHP, university hospitals, private hospitals and 98% of PHCs; syringes and needles were taken from a sterile packet and/or fitted with caps.;
- > 94% of facilities had a focal point for infection control, an infection control policy/guidelines;
- Most of observed Governmental Health Facilities (90%) had no overflowing or pierced sharps containers of any type in any area of the facility.
- The estimated number of injections per person per year for all study areas was 5.9 while in an urban area was 6.7 and in rural areas was 5.8;
> Around 70% of health care facilities had sinks and soap for cleansing the hand, and about half of them had clean towels for drying the hand.

> Most of the facilities (88%) had no multi-dose vials with needles left in the diaphragm.

> Nearly 35% of HFs prepared injections on a clean dedicated table or tray and around 40% of HFs healthcare workers cleaned the access diaphragm of multi-dose vials with antiseptic before inserting a needle into the vial;

> Around 54% of providers removed the needle from the syringe using hands, after use while 57% of providers practiced recapping of needles after use.

> Only 51.1% of the providers’ received the three doses of Hepatitis B vaccine while 81.5% of the providers received at least one dose of Hepatitis B vaccine – Based on National Regulations Health Care workers should receive the three doses of Hepatitis B Vaccines.
What is next?

- Study the health impact and economic costs associated with unsafe and unnecessary injections and the impact of their reduction (including baseline data collection on costs of infections, disabilities, and deaths due to unsafe injections)

- Develop Communication strategy/ plan

- Encourage national factories to start investing in safety engineered syringes and Safety boxes

- Provide standardized safe injection training for injection providers
Cont. What is next?

- **Facilitation of technology transfer in the country, and acquiring the WHO prequalification for safety engineered devices produced in Egypt.**

- **Assessment of the procurement and supply management areas (incl. Healthcare waste management).**

- **Inventory of policies around safe injections and gaps in policy content**
Key Process Indicators

- In depth review of available data;
- Baseline assessment;
- Inventory of policies;
- Model to determine economic impact of cost saving on health system after investing in injection safety;
- Integration with other ongoing programmes;
- Health-care workers training;
- Engagement of industry to produce and supply safety engineered syringes;
- Communication campaign;
- Assessment of procurement and supply management areas;
- Adopting global campaign tools;
- End of project evaluation.
Thank you