

Editorial

Injection Safety in Pakistan: Auto Disable (AD) Syringes in the Curative Sector

A. Altaf

Community Health Sciences, Aga Khan University, Karachi.

At the annual meeting of Safe Injection Global Network (SIGN)* partners of the SIGN alliance advocated the need of auto disable (AD) syringe for therapeutic use as most unsafe injections are given for therapeutic purpose. AD syringes include a reuse prevention feature i.e., a feature that activates after intended use to prevent subsequent reuse of syringes. These syringes provide an opportunity to prevent reuse of injection equipment in the absence of sterilization. These particular type of syringes have been in the limelight recently with the WHO-UNICEF-UNFPA triad promoting global shift to AD syringes by 2003. AD syringes are now routinely used in Expanded Programme of Immunization (EPI) globally including Pakistan.

An estimated 16 billion injections are given worldwide each year and five percent of these injections are in the immunization sector. Globally unsafe injections cause two million cases of hepatitis C virus, 21 million cases of hepatitis B and 0.26 million HIV infections each year.¹ The World Health Organization (WHO) defines a safe injection that does not harm the recipient, does not pose provider to any avoidable risk and does not result in waste that is dangerous to the community.² Transmission and high rates of HIV infection in Africa as a result of unsafe healthcare practices, including unsafe injection practices, have been debated in a series of recently published articles.³⁻⁵ Epidemiological studies in Pakistan have also associated unsafe injections in the healthcare settings as the primary cause of spread of hepatitis B and C.⁶⁻⁸

Reuse prevention syringes for therapeutic purposes are available in 3ml and 5 ml sizes. The cost of single unit is high for developing countries, however, in the industrialized world, this type is routinely used, as medical safety device is mandatory by law in some countries. The high cost of the single unit is still an issue for developing countries. However, manufactures have shown flexibility and willingness to bring the cost down. To economise on these syringes the taxes, duties and levies should be exempted.

Field trials for usage and acceptability have been planned by the SIGN alliance and will be conducted in different parts of the world including Pakistan. There are two key research questions:

1) What is the user acceptability of the AD syringes in curative sector.

2) What is their effectiveness in preventing reuse when thrown into the wild with other syringes and a demand creation campaign.

If the acceptability and usage of this particular product shows good results it is hoped that the price of reuse prevention syringes for therapeutic purpose will come down thus limiting the reuse of single use disposable syringe. The transmission risk of hepatitis B and C and HIV infection in healthcare settings can be accomplished with only a modest shift in the assignment of resources.

*Note

Safe Injection Global Network (SIGN) was formed in 1999 with the aim to achieve a safe and appropriate use of injections worldwide. The coalition includes UN agencies, governments, non governmental organization and academic institutions. A permanent SIGN secretariat was formed at Blood Safety and Clinical Technology (BCT) department of WHO headquarters in Geneva. Annual meetings are held each year since 2000 to provide opportunities to review common progress and to decide action points for the members of SIGN alliance. There is also a website (www.injectionsafety.org) to ensure easy access through a user oriented domain name. This year the annual meeting was held in Nairobi, Kenya as a satellite meeting on infection control and injection safety prior to International Conference on AIDS and STIs in Africa (ICASA) from 18-20 September, 2003.

References

1. Global Burden of Disease study. World Health Organization 2000.
2. Aide Memoir on Injection Safety. World Health Organization 2000.
3. Gisselquist D, Rothenberg R, Potterat J, et al. HIV infections in sub-Saharan Africa not explained by sexual or vertical transmission. *Int J STD AIDS* 2002;13:657-66.
4. Gisselquist D, Potterat JJ, Brody S, et al. Let it be sexual: how health care transmission of AIDS in Africa was ignored. *Int J STD AIDS* 2003;14:148-61.
5. Gisselquist D, Potterat JJ. Heterosexual transmission of HIV in Africa: an empiric estimate. *Int J STD AIDS* 2003;14:162-73.
6. Khan AJ, Luby SP, Fikree F, et al. Unsafe injections and the transmission of hepatitis B and C in a periurban community in Pakistan. *Bull World Health Organization* 2000;78:956-63.
7. Luby SP, Qamruddin K, Shah AA, et al. The relationship between therapeutic injections and high prevalence of hepatitis C infection in Hafizabad, Pakistan. *Epidemiol Infect* 1997;119:349-56.
8. Pasha O, Luby SP, Khan AJ, et al. Household members of hepatitis C virus-infected people in Hafizabad, Pakistan: infection by injections from health care providers. *Epidemiol Infect* 1999;123:515-18.