Injectable Contraceptives in Uniject

Health need
The World Health Organization (WHO) estimates that annually the reuse of injection devices may cause 20 million infections with hepatitis B virus, 2 million infections with hepatitis C virus, and 250,000 infections with HIV worldwide. International development and family planning agencies have been seeking feasible and affordable methods to reduce unsafe injection practices that could lead to the spread of bloodborne diseases. This is true for vaccines and medicines as well as injectable contraceptives that are becoming increasingly popular around the globe as women search for safe, highly effective, reversible methods of contraception that do not require compliance with a daily regimen.

Depot medroxyprogesterone acetate (DMPA, also known as Depo-Provera) is administered by injection once every three months, making it highly convenient. While provision of sterile needles and syringes with every dose of contraceptive is the current standard, the risk of reuse still exists. Autodisable (AD) syringes prevent reuse, but like disposable syringes they can be diverted to other uses during the distribution process.

Technology solution
With guidance from WHO and a multitude of other collaborators, PATH developed an AD, prefilled syringe known as the Uniject® device. Today, the Uniject device, which is licensed to BD, prevents reuse, simplifies matching of syringes and supplies, ensures dose accuracy, and is so simple to use that injection at home by the patient or a family member is feasible. Use of the Uniject device with injectable contraceptives for delivery in developing countries has been a long-term goal at PATH, United States Agency for International Development (USAID), and other international agencies.

Current status and results
BD has invested significant funds to develop large-scale manufacturing operations so it can supply empty Uniject devices to pharmaceutical companies in large quantities at reasonable prices. After a merger with Pharmacia in 2003, Pfizer became the dominant supplier of DMPA internationally as well as USAID and PATH’s industry collaborator for development of DMPA in the Uniject device. Pfizer is actively working through the lengthy process of qualifying and registering their new subcutaneous formulation of DMPA in the Uniject device.

*Uniject is a registered trademark of BD.

Availability
Uniject devices and the associated equipment for filling and packaging are available to vaccine and pharmaceutical companies from BD Pharmaceutical Systems, New Jersey, USA, Roderick Hausser, Tel: (201) 847-5185, Fax: (201) 847-4869. For more information regarding this project, contact Steve Brooke at sbrooke@path.org.

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