

Depot-medroxyprogesterone acetate (DMPA or Depo-Provera) is an extremely safe, effective, and reversible method of family planning.¹ It is the most studied of injectable contraceptives, which have been used safely by some 30 million women in more than 100 countries.²

Although routinely given by clinic-based medical personnel, DMPA can also be safely provided by properly trained paramedical personnel in community-based distribution (CBD) programs. This has been successfully demonstrated in numerous settings worldwide.³ Guidance exists to help paramedical personnel (including CBD workers) meet the following basic conditions for safe DMPA administration:

- Potential users should be screened for medical conditions that would contraindicate their use of the method.
- Potential users should be counseled about DMPA's common side effects.
- CBD workers should be able to give deep intramuscular injections of the correct dose of DMPA.
- CBD workers should safely dispose of used needles and syringes.

CBD workers can successfully screen women to begin using DMPA.

The vast majority of women can use DMPA; however, women with certain medical conditions should not use this contraceptive. These conditions include pregnancy, breastfeeding during the first six weeks postpartum, serious vascular disease, liver disease, history of stroke, breast cancer, or diabetes. Medical conditions that contraindicate DMPA initiation are quite rare in potential users and were easily identified by CBD workers in a study conducted in Nepal.⁴ However, to further help CBD workers screen potential DMPA users for such conditions, Family Health International (FHI) has developed and extensively field-tested a checklist, containing 13 simple “yes” or “no” questions, based on the World Health Organization's (WHO's) *Medical Eligibility Criteria for Contraceptive Use*, which was updated in 2004⁵ (see *Checklist for Clients Who Want to Initiate DMPA [or NET-EN]*). The checklist is available in English, Spanish, and French at www.fhi.org/en/fp/checklistse/chklistfpe/index.html.

CBD workers can be trained to counsel about side effects and to refer clients, if necessary.

DMPA users often experience side effects, such as menstrual changes (prolonged, heavy, or irregular bleeding; spotting between periods, or amenorrhea [no menstruation]), headaches, and weight gain. If they know what to expect, women can adjust to the menstrual changes; most other side effects subside with time. However, side effects are the primary reason why women discontinue using DMPA. Studies have demonstrated that providing full and intensive counseling can significantly increase continuation rates for DMPA.⁶ Thus, adequate training of CBD workers to counsel women on changes to expect when they begin using DMPA is vital. In the CBD of DMPA Matlab project in Bangladesh, CBD workers were trained to counsel their clients about DMPA use (see case study in brief no. 7), although counseling by both CBD and clinic-based providers could have been improved.

CBD workers can safely give injections.

Two major concerns about CBD workers giving injections – whether they can safely give deep intramuscular injections and safely dispose of needles and syringes – are largely unfounded:

- CBD workers have demonstrated that they can safely give intramuscular injections. In the Matlab project in Bangladesh, infections after injections by CBD workers were extremely rare – about three per 10,000 injections. Meanwhile, a new subcutaneous DMPA formulation (Depo-subQ Provera 104 or DMPA-SC) that can be injected under the skin (and thus is less painful and easier to administer than intramuscular injections) is expected to be available soon in prefilled disposable Uniject devices.

KEY POINTS

- Injectable contraceptives are extremely safe for the vast majority of women. An estimated 30 million women in more than 100 countries have used them.
- CBD workers have been trained to safely provide DMPA in projects in Africa, Asia, and South America.
- CBD workers, like clinic-based providers, can use a checklist based on the 2004 WHO *Medical Eligibility Criteria for Contraceptive Use* to screen out women who should not use DMPA.
- Standardizing procedures for collecting and disposing of used needles and syringes helps prevent the spread of infectious diseases.



- Concerns that needles and syringes be disposed of properly and not reused have been reduced by the availability of single-use injection devices, such as the SoloShot FX. This device, available since 2002, is packaged with all DMPA shipments supplied by the U.S. Agency for International Development (USAID). Nonreusable devices can be easily disposed of through burning.⁷ However, waste disposal is an ongoing concern that needs careful planning and follow-up to ensure public safety.

Community-based Distribution of DMPA in the Age of HIV/AIDS

Current knowledge concerning a potential relationship between hormonal contraception and HIV acquisition, transmission, and disease progression does not warrant changing current family planning recommendations that women who are at risk of HIV infection or who are infected with HIV may safely use hormonal contraception.⁸

However, because hormonal contraception does not protect against HIV, hormonal contraceptive users at elevated risk of acquiring HIV should also use condoms consistently and correctly with each sexual act if they are not in a mutually monogamous relationship with an uninfected partner. HIV-infected women (regardless of the contraceptive method they use) should also use condoms consistently and correctly to reduce any possible risk of HIV transmission to their partners.

Women who are infected with HIV, receiving antiretroviral (ARV) drug therapy, and wishing to continue hormonal contraceptive use can be counseled to do so. Any reduction in progestin that an ARV drug might cause would probably be too small to influence the efficacy of injectable contraceptives such as DMPA; a single dose of DMPA is considered enough to provide a wide margin of effectiveness.⁹ Nevertheless, women on ARV therapy need to receive their DMPA injections on time. DMPA injections can usually be given up to two weeks late, but for women on ARV therapy, the potential risk of a subtherapeutic dose is greatest at the end of the 13-week dosing period.

To reduce CBD workers' risk of HIV acquisition via needle stick, training should emphasize safe disposal of used needles and syringes. Several excellent publications from WHO, the Program for Appropriate Technology in Health (PATH), and other organizations are available to help program managers develop processes for safe disposal of used DMPA supplies.¹⁰

Note: The conventional term "community-based distribution" (CBD) is used throughout these briefs for the sake of consistency. However, the concept of distributing commodities to individuals in communities is gradually being replaced by that of delivering not only commodities, but also services. Thus, the term "community-based services" (CBS), which embraces activities carried out through such vehicles as agricultural extension programs, drug shops, pharmacies, and literacy programs, is increasingly used. Likewise, alternative terms – such as community health workers (CHWs), community reproductive health workers (CRHWs), community health officers (CHOs), or village health workers (VHWs) – have been used to more accurately describe more specific categories of community-based paraprofessionals.

- Landre RE. *New Era for Injectables*. Population Reports, Series K, No. 5. Baltimore, MD: Johns Hopkins School of Public Health, Population Information Program, 1995.
- United Nations Population Division. *World Contraceptive Use 2005*, wall chart. New York, NY: United Nations, 2005.
- Stanback J, Mbonye A, LeMelle J, et al. *Final Report: Safety and Feasibility of Community-Based Distribution of Depo Provera in Nakasongola, Uganda*. Research Triangle Park, NC: Family Health International, 2005; Ashraf A, Ahmed S, Phillips JF. The example of doorstep injectables. In Barkat-e-Khuda, Kane TT, Phillips JF, eds. *Improving the Bangladesh Health and Family Planning Programme. Lessons Learned through Operations Research. Monograph No. 5*. Dhaka, Bangladesh: International Centre for Diarrhoeal Disease Research, Bangladesh, 1997; Fernández VH, Montúfar E, Ottolenghi E. Injectable contraceptive service delivery provided by volunteer community promoters. Unpublished paper. Population Council, 1997; León F. Utilizing operations research solutions: a case study in Peru. Unpublished paper. Population Council, 2001; Garza-Flores J, Del Olmo AM, Fuziwara JL, et al. Introduction of Cyclofem once-a-month injectable contraceptive in Mexico. *Contraception* 1998;58:7-12; McCarragher D, Bailey P. Bolivia: Depo-Provera provision by community based distribution workers and other CIES staff in El Alto. Unpublished paper. Family Health International, 2000.
- Ria C, Thapa S, Bhattarai L, et al. Conditions in rural Nepal for which DMPA initiation is not recommended: implications for community based service delivery. *Contraception* 1999;60:31-37.
- World Health Organization (WHO). *Improving Access to Quality Care in Family Planning: Medical Eligibility Criteria for Contraceptive Use. Third Edition*. Geneva, Switzerland: WHO, 2004. Available: www.who.int/reproductive-health/publications/mec/.
- Canto de Cetina TE, Canto P, Ordonez LM. Effect of counseling to improve compliance in Mexican women receiving depot-medroxyprogesterone acetate. *Contraception* 2001;63:143-46; Lei ZW, Wu SC, Jiang S, et al. Effect of pretreatment counseling on discontinuation rates in Chinese women given depot-medroxyprogesterone acetate for contraception. *Contraception* 1996;53:357-61.
- Program for Appropriate Technology in Health (PATH), U.S. Agency for International Development (USAID). *Introducing Auto-Disable Syringes and Sharps Disposal Containers with DMPA*. Seattle, WA: PATH, 2001. Available: www.rho.org/files/auto-disable.pdf.
- WHO.
- Said S, Omar K, Koetsawang S, et al. A multicentred phase III comparative clinical trial of depot-medroxyprogesterone acetate given three-monthly at doses of 100 mg or 150 mg: 1. Contraceptive efficacy and side effects. World Health Organization Task Force on Long-Acting Systemic Agents for Fertility Regulation. Special Programme of Research, Development and Research Training in Human Reproduction. *Contraception* 1986;34:223-35.
- World Health Organization (WHO). *Management of Waste from Injection Activities at District Level: Guidelines for District Health Managers*. Geneva, Switzerland: WHO, 2006. Available: www.who.int/water_sanitation_health/medicalwaste/mwinjections.pdf; PATH; Neresian P, Cesarz V, Cochran A, et al. *Safe Injection and Waste Management: A Reference for Logistics Advisors*. Arlington, VA: John Snow, Inc./DELIVER for the U.S. Agency for International Development (USAID). Available: portalprdr1.jsi.com/pls/portal/docs/PAGE/DEL_CONTENT_PGG/DEL_PUBLICATION_PGI/DEL_GUIDE_HANDBK_PGI/SAFE_INJ_REF.PDF.

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