Rising Popularity of Injectable Contraceptives in Sub-Saharan Africa

Introduction

Injectable contraceptives are fast becoming the method of choice among married women in sub-Saharan Africa. In several countries in the region, the proportion of women using injectable methods has surpassed the proportion of women using the pill. This is true even in some countries where the pill had been the most popular modern method in the 1980s and 1990s. While this new trend is greeted with excitement and joy in some quarters, it is a source of fear and worry for some others. For the former, the source of joy is multiple: that women are finally able to access a method of contraception that is highly effective, convenient and long-lasting. However, the latter group worries about commodity security, cost and sustainability.

Without taking either of the two sides, this paper aims to investigate the following questions:

- What factors are driving the rapid increase in the use of injectables among married women in sub-Saharan Africa?
- What factors separate countries where injectables have overtaken the pills from countries like Zimbabwe where the pills remain the dominant method of contraception?
- Who are the users of DMPA and what are their attributes? For example, if convenience is the reason, the rapid increase in the use of injectables might occur faster in rural areas where service delivery points are more difficult to access.
- What are the consequences and programmatic implications of DMPA becoming the main method in a country?

To answer the first question, we rely in both published and unpublished materials, program-level data as well as data from the Demographic and Health Surveys for several countries in sub-Saharan Africa. We explore reasons such as the belief of Africans in the efficacy/superiority of injections compared with pills, the "secret use" hypothesis, the convenience and time saving advantages of the method, its low user-failure rates, etc. To answer the second question we rely on program data as well as literature review to trace the historical development and context of family planning programs in Zimbabwe and Malawi.

Answers to the third question rely on the analysis of DHS data for selected countries: Malawi, Tanzania, and Ghana. The goal is to gain better understanding of the determinants of use of DMPA at individual levels using nationally representative data. Both bivariate and multivariate methods are used for the analysis. Then we discuss the consequences this trend for contraceptive

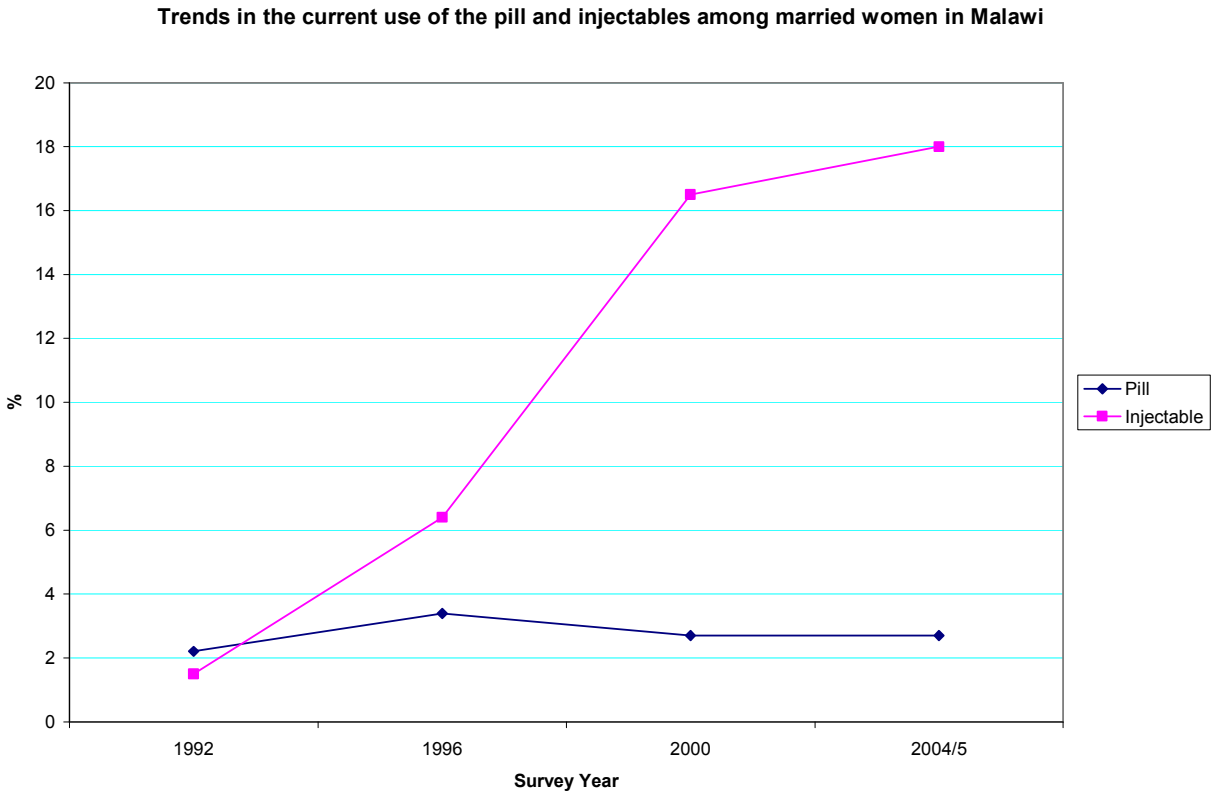
security and sustainability of family planning programs in the region. The paper concludes by making specific recommendations on the way forward.

What are injectable contraceptives? These are contraceptives that are given by means of injection. The first of these methods was developed soon after the oral contraceptive pills in the 1960s. However, because of various legal barriers, their availability in several countries was limited. For countries that receive programmatic support in family planning, injectable contraceptives could not be supplied until after they were approved in the US in the 1990s. The analysis in this paper concentrates on the most widely used form of injectable contraceptives – the depot medroxyprogesterone acetate (DMPA) or Depo Provera, one vial of which protects against conception for three months. However, it is recognized that there are a few other forms of injectables. One is the progestin only injectable contraceptive is called Noristerat, which contains norethindrone enanthate and is to be given every two months. We recognize that there are several monthly injectables which contain progestin and estrogen. Norplant is also among the hormonal methods but their use in sub-Saharan Africa is minimal. In monitoring trends in injectables, the small proportion using Norplant is added to the proportion using injectables.

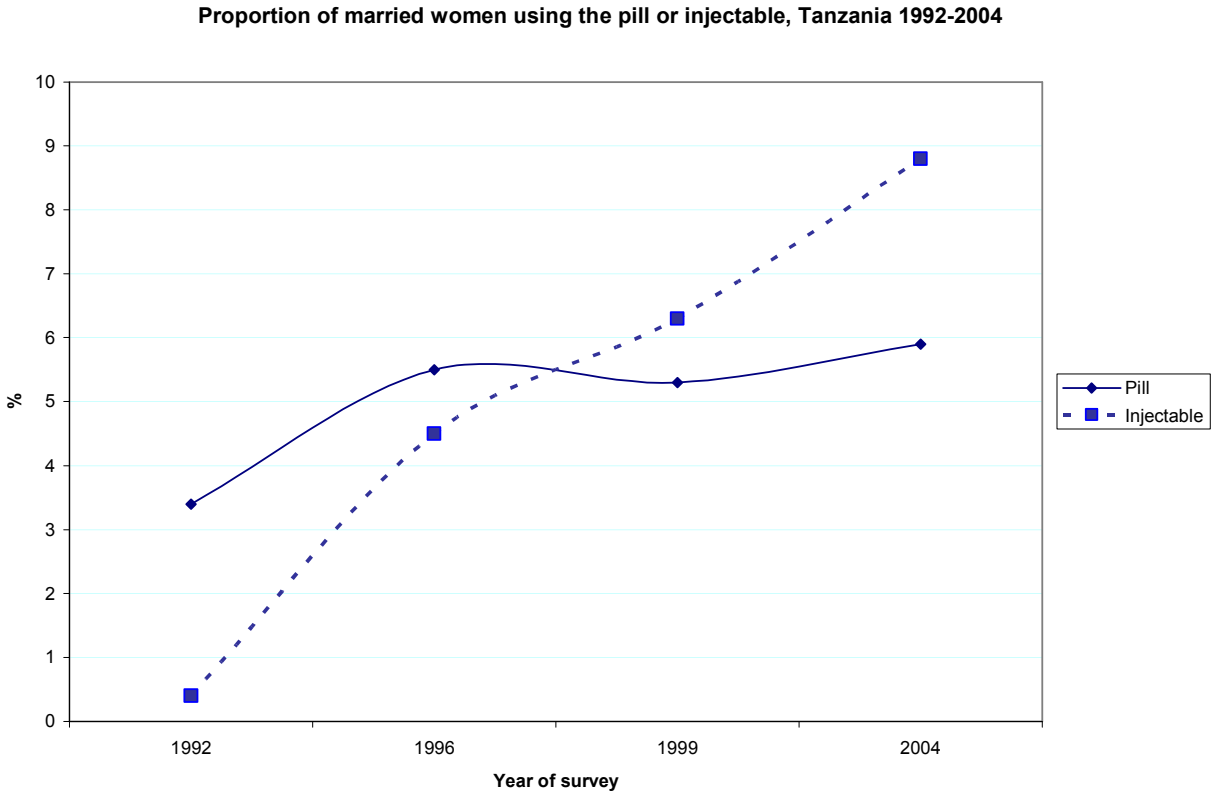
What advantages do injectables contraceptives offer? Injectables, particularly DMPA, offer many advantages and convenience that may be appealing to women of reproductive age. DMPA is a good method for those who want convenience, or are uncomfortable with the estrogen side effects of pills, do not want the constraining use of a pill-a-day regiment, and those who are breastfeeding but want a safe hormonal contraceptive method. DMPA combines high long-lasting effectiveness with reversibility and privacy of use. DMPA can be obtained quickly in clinics, and leaves no traces behind in the house to be discovered by others. It does not interrupt the flow of events during relationships. It also offers some non-contraceptive benefits, including reduced risks of ectopic pregnancies and of pelvic inflammatory disease, increased iron levels in the blood, less painful sickle cell anemia crises. From a demographic viewpoint, DMPA can reduce the incidence of unintended pregnancies manly because user-failure rates are perhaps zero. A study in rural Zimbabwe reported high satisfaction among users of DMPA and reported that the method was mainly used for spacing of births (Mitchel and Thistle, 2004). Because the method is used mainly by spacers, reversibility is an advantage. This characteristic of users would also mean a high likelihood of discontinuation and perhaps method switching

Trends in their use in Selected African Countries

In Malawi, the prevalence of injectables which was less than 2% in 1992 increased more than 9-folds by 2004-2005. The proportion of women using the pills just increased slightly (by 0.5%) during the period. CPR increased 3-folds. Between 2000 and 2004, the only increase in modern contraceptive use was among the users of injectables.



In Tanzania, between 1992 and 2004, while modern CPR increased from 3.4% to about 6%, the percentage of married women using the injectables increased over 20-fols from 0.4% to 8.8%.



In Ghana, although the pill was the leading modern method used between 1988 and 1998, the latest survey in the country showed that the proportion of married women using injectables have overtaken that of pill users.

Even in Kenya where CPR seemed to have stagnated between 1998 and 2003, the proportion of women using injectables still increased by 33% in the period while the use of pills decreased.

With what implications?

Increases in the prevalence of DMPA have cost implication. Available data from USAID Office of Population indicate that one couple year of protection (CYP) for DMPA costs about $4.32 without counting the cost of service delivery. This is 32% higher than the cost of one CYP for pills and 9 times the cost of one CYP of intrauterine device (IUD). Therefore the rising prevalence of DMPA use has enormous cost and commodity security implications for poor countries like Malawi where the proportion of women using DMPA has increased 9 times since 1992.

Apart from cost, there is the additional workload for health workers of giving contraceptive injections to women. In some settings, this additional workload led doctors and nurses to promote the pills while reserving injectables for only those who cannot tolerate the pills. The additional workload is particularly heavy for Norplant, which is probably one of the reasons why its prevalence levels remain low in the region.

There are also potentially harmful side effects, one of which is loss of bone mineral density among long-term users. In the US, FDA is reported to have added a “Black Box” warning to DMPA’s labeling to highlight this potential side effect (Contraceptive Technology Update, 2005).