

## ABSTRACT

It is not suitable or cost-effective to provide IPCs based on age. The rationale for using these products should consider the cost of prescribing one over another.

## INTRODUCTION

**Introduction** The use of depot medroxyprogesterone acetate (DMPA) in the treatment of hyperandrogenism and the prevention of ovulatory failure is limited. In addition to the potential to improve the progestational outcome of female-to-male transsexuals, DMPA has also been found to be effective in the prevention of ovarian failure, and the clinical utility of depot medroxyprogesterone acetate is currently unknown.

The aim of the present study was to compare the efficacy of depot medroxyprogesterone acetate (DMPA) in the prevention of ovulatory failure, and the clinical utility of depot medroxyprogesterone acetate in female-to-male transsexuals.

**Methods** Using World Health Organisation (WHO) guidelines on safety/cost criteria for inclusion on the Model List of Essential Drugs (EDL), we can make informed decisions about drug selection and rational use, considering evidence of efficacy or reversibility from four pharmaceutical depots where IPCs were used and their side effects from a rural sub-district of KwaZulu-Natal, South Africa. The literature's assertions are accurate. The search for published clinical trials and reviews on DMPA and NET-EN involved searching through computerized and hand searches, as well as reviewing relevant international and South African policy documents. Results showed that despite significant challenges in analysing data, there are few studies that directly compare DGPA to the DFHD (and thus on, but not exclusively), and most published studies were conducted in the 1970s and early 1980s (such as those by Trussel et al.). However, this section only provides a summary of relevant findings. Despite differences in efficacy, both IPCs exhibit demonstrable effectiveness. The differences depend on the type of product used and various factors such as the study, timing, population, body mass index, dosing regimen, and provider training. A comparison study conducted by Kaunitz and colleagues found that NET-EN and DMPA gave comparable outcomes, with a cumulative 2-year pregnancy rate of 0.4 per 100 woman-years. Direct comparative data on the reversibility of DMPA and NET-EN are scarce, with some reviewers indicating that it takes longer to return to fertility than with COMOXGEN and an average time of 4 weeks after the last injection. Despite the fact that there is a strong literature on the poor side effect profile of injectables, the most frequently reported side effects are menstrual disturbances like amenorrhoea, irregular bleeding, and heavy bleeding. Compared to NET-EN use, users of both dosage regimens reported higher rates of discontinuation during the first six months of use. IPCs are considered to be relatively safe methods of contraception, and recent studies suggest that DMPA and NET-EN may not increase the risk of breast cancer, although there is little information on the potential impact of DPMA on bone density, especially in adolescents and long-term users. Little is known about the possible effect of this contraceptive form, with prospective studies still awaiting findings. The World Health Organization's Medical Eligibility Criteria for Contraceptive Use categorizes DMPA and NET-EN as complementary methods, without any differentiation between them in terms of side effects or contraindications. The only age restriction related to IPC use is that "for women under 16 years old, there are theoretical concerns about hypo-oestrogenic effects..." p.54.

## CONCLUSION

**Conclusions and Recommendations** The age-based issuance of IPCs is neither appropriate nor cost-effective. It requires training of health workers and counselling of clients to correct this misconception. If clients want instant fertility recovery after discontinuing contraception, both products should be considered when training health worker on rational use of injectable contraceptives. Since DMPA is a cheaper alternative, healthcare worker training should consider the cost implications of prescribing one product over another. However, in cases where IMPA cannot be tolerated, NET-EN should take precedence. The registration of combined injectable contraceptives in South Africa should be encouraged as they have a better side effect profile than IPCs. This would be an expensive option, and therefore, only those cases where side effects with the IECs are severe. A better alternative, particularly for young people, may be the use of male or female condoms with backup of emergency contraception tablets to safeguard against unwanted pregnancy and sexually transmitted infections.