Progestogen-only injectable contraception is widely used across the world and is particularly popular in resource poor countries with a high incidence of HIV infection e.g. in sub-Saharan Africa. It is clearly important therefore to establish whether there is any relationship between the use of injectable contraception and increased risk of HIV acquisition.

A recently published meta-analysis by Ralph et al [1] of data on use of the injectable contraceptive depot medroxyprogesterone acetate (DMPA, Depo Provera®) and HIV acquisition suggests a moderate increase in risk. Twelve studies met the authors’ inclusion criteria; all were from sub-Saharan Africa. The studies were a mixture of those designed specifically to examine the HIV-contraception relationship; others (the majority) were secondary analyses from studies primarily designed to explore HIV/cervical cancer interventions. Follow up ranged from 12 to 31 months and study retention was generally high. There was evidence of an increase of HIV acquisition in DMPA users in ten of the studies giving a pooled hazard ratio of 1.4 (95% confidence intervals 1.16-1.69) compared with women not using hormonal contraception. No evidence of increased risk was found in users of oral contraception or the progestogen-only injectable norethisterone enanthate (Net-en) but the numbers of women using these methods was small.

There has been considerable debate and controversy about the ongoing relationship between DMPA and risk of HIV acquisition since an association was first described in 1991 [2]. There are significant concerns about many of the studies, the most important being the confounding factor of condom use. Couples relying on hormonal contraception for pregnancy prevention are arguably less likely to use condoms than couples not using hormonal methods and, of course, condoms confer protection from HIV infection. Some have argued that only a randomised trial can identify a potential link and such a trial is under consideration. Others claim that to ignore the possible association between use of DMPA and increased HIV acquisition could lead to otherwise preventable HIV infections in women at high risk. However in countries
where rates of HIV infection are high so, often, is maternal mortality. If use of a highly effective contraceptive method such as DMPA in women at high risk of HIV infection was to decline sharply without other effective contraceptive methods being substituted this would result in a significant increase in unintended births and both maternal and infant morbidity and mortality. [3], [4]

In 2012, the World Health Organisation (WHO) convened a technical consultation on the use of hormonal contraceptive methods and the risk of HIV acquisition [5]. An updated body of evidence was then reviewed in March 2014 by WHO’s Guideline Development Group as part of the Department of Reproductive Health and Research’s periodic revision of its entire Medical Eligibility Criteria (MEC) for Contraceptive use guidance document. Following this, WHO issued a 2014 guidance statement on hormonal contraceptive methods for women at high risk of HIV and living with HIV which states “Women at high risk of acquiring HIV can use the following hormonal contraceptive methods without restriction: combined oral contraceptive pills, combined injectable contraceptives, combined contraceptive patches and rings, progestogen-only pills, progestogen-only injectables and levonorgestrel and etonorgestrel implants (MEC 1)” [6]. However WHO added “Women at high risk of HIV who are using progestogen only injectables should be informed that available studies on the association between progestogen-only injectable contraception and HIV acquisition have important methodological limitations hindering interpretation. Some studies suggest that women using progestogen-only injectable contraception may be at increased risk of HIV acquisition; other studies have not found this association.”

WHO also emphasises that women at high risk of HIV should be informed about and have access to HIV prevention measures such as male and female condoms and other measures to prevent and reduce their risk of HIV infection and sexual transmitted infections regardless of which form of contraception they choose. The recent paper by Ralph et al adds to the evidence base and highlights the complexity of balancing benefits and risk. The lead author is quoted in a press statement as saying “The moderate elevation in risk observed in our study is not enough to justify a complete withdrawal of DMPA for women in the general population”.

In the UK the risk of HIV infection among the heterosexual population is low (it is estimated that 1,500 people acquired HIV through heterosexual contact in the UK in 2013 [7]) and DMPA is a popular method of contraception particularly among young people at risk of teenage pregnancy. While the UK MEC will be reviewed and revised during 2015 there is no reason to advise against use of DMPA even for women at ‘high risk’ of HIV infection. Like WHO, the Faculty of Sexual and Reproductive Healthcare stresses the need for women at risk of HIV to use condoms.

References:


   http://apps.who.int/iris/bitstream/10665/128537/1/WHO_RHR_14.24_eng.pdf?ua=1