

# “Depo-Provera, Is this an ideal contraceptive for young people, but what about depression”?

Depot-medroxyprogesterone acetate (Depo, or depo-provera), was thought to cause changes in mood among women using it for contraception. The purpose of this short article is to consider the current research about the effect of Depo on mood and if this contraceptive choice can be used with young women with a past or current history of depression. The paper critically reviews past research articles concerning the use of depo.



**Nurse Practitioner, Louise Roebuck in her Waves consulting room.**

Working with young people in school settings, at Family Planning Clinics and at Youth One Stop Shops, some of the issues presenting are to do with contraceptive and sexual health. I am often faced with vulnerable at risk youth who have become sexually active at a young age. Many of these young women have chaotic lives, have come from a neglected and abusive past and taking the oral contraceptive has found them facing unplanned pregnancies as they find it difficult to take a pill every day. Others choose depo as it is convenient, just four injections a year, it suits their life style at this time in their lives. Many of these young women have also had past and present depressive episodes, are self harming and also dealing with sexual abuse,

neglect and trauma from their past lives. Mental health practitioners have been concerned that depo may be associated with changes in mood or even an increase in their depressive symptoms. The purpose of this paper is to look at research and best practice so we can offer young woman with a choice that suits them, without the need for concern that this will cause further increases in their depressive symptoms.

Depression and depo-provera, fact or fiction?  
 In the 1970's early clinical trials of depo suggested from some data a small percentage of women reported negative mood changes (Cromer, 2000). These studies have shown that they all shared a

crucial flaw, they failed to collect baseline data on mood prior to depo starting, so this was not accurate in estimating the increased incidence of depression. Cromer (2000), concludes that if investigators do not collect noticeable information before initiating hormonal treatment, they cannot be certain that adverse effects are not attributable to the treatment, rather than representing symptoms that the woman had prior to commencing on depo.

82% of pregnancies in the 15-19 age group in the United States are unintended, nearly 100% in young women under 15. As the failure rate of depo is 0.3% this method is the top tier of contraceptive efficacy (Whitaker & Gilliam, 2008).

Westoff (2003), states that depo-provera is a highly effective contraception option that many woman prefer to use. This clinical trial was held over one year and included young women in a Primary Health Care practice, an adolescent clinic, a Family Planning Clinic and a psychiatric hospital. Of the 3857 women in the study less than 2% report depression. Westoff (2003), concluded that depo does not cause depressive symptoms; these young women would present with depression regardless of the hormonal injectable contraceptive they were on.

In 1992 the World Health Organisation published the results of a nine year study of women using depo. The overall data showed no increase in depressive symptoms; the study included women who had more depressive symptoms at study entry. For all women there was no increase in symptoms over the course of the study.

Gupta, O'Brien and Jacobsen (2001), did a 12 month prospective study in adolescents, this similarly showed that there was no emergence of depressive symptoms or significant change in negative or positive affect. A prospective study set in a United States urban clinic amongst young, poor Hispanic inner city women compared adolescents on depo to controls. These young women were known to have a higher prevalence of depression. They used the Beck Depression Inventory (BDI) and the Multiple Affects Adjective Checklist, Revised. (MAACL-R). This study found that there was no statistically significant differences in depressive symptoms when using depo as a contraceptive over a period of one year and there was no significant changes in negative or positive affect (Haider & Darney, 2007),

A study by Boroditsky (1999), considered fatigue and depression alongside depo provera use in adolescents. His study highlights the difficulty in

## **DEPO PROVERA USE AND YOUTH...** *poem written by Lou Roebuck*

*June 2009*

*You're about to hear about depo and youth  
Listen to me as I hear the truth  
They often have issues and feel real bad  
However this was happening years before the JAB*

*Lives of abuse, neglect and dysfunction  
Terrible things happening, always something  
Some people think depo is real risky  
But we all know young people can be frisky*

*How the hell can some take the pill  
Every day, not an option, when at the pub and the mill  
Drinking and fighting, look at what's real  
Get over ourselves, reach out and feel*

*Let's look at the research, depo can be the right thing  
To stop the pain from an overnight fling  
They come to us horny, maybe smoking a bong  
Preventing youth having depo, may be very wrong*

*Look at the options and way them up  
Trust us at Family Planning and youth one stop shops  
Ask the right people, get the right advice  
Depo is ok, is safe and is alright*

*Depo is not the cause of mood swings  
This is caused by many other things  
At times it is needed to keep the kids safe  
Depo certainly has its place*

*Look at the lives way before they had sex  
We all know this has had a negative effect  
Depo provera is an option at times  
To help our young women in their lives*

*Listen again to the research, keep up to date  
Our youth rely on us, to be safe with their mates  
We need to advise, assist and let them know  
The safe way to have sex, have fun and give life a go*

*As health professionals supporting youth  
They need to hear all, including the truth  
Depo is not a bad thing for them to have anyway  
It can provide safety and protection today*

*No matter what we teach, say and do  
We always need to stay very true  
Depo is an option, can be the right one  
As we all know youth want to have fun*

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reporting of these symptoms and subjective reporting can be markedly increased just by the type of and frequency of questioning. There are so many other variables to consider including recent onset of sexual activity, interpersonal and intrapersonal issues which can have a major effect on young women whether on depo or not. Boroditsky, a Canadian gynaecologist, advises that many young, single women often change relationships, and he has seen many practitioners choose depo as an ideal contraceptive as first line therapy for young women with significant psychosocial problems, communication difficulties, language barriers, developmental challenges and other medical conditions that would contraindicate the use of other methods e.g. deep vein thrombosis and epilepsy. These young women were often reporting disrupted life styles, living on the streets or couch hopping and wandering through life with no fixed routine. Depo is often a better option for this group as an unplanned pregnancy will cause a lot more stress and bring up other issues such as teen pregnancies and terminations.

Cromer (2000), looked at a large group of young people that were on depo and those that were not on any hormonal contraception. 397 women were enrolled in the study. Adolescent depression prevalence has been reported to range in a western population from .4%-8%. This study has demonstrated that the use of depo for contraception does not result in depressive symptoms or worsening of a pre-existing depressive state. If the young woman had a pre existing depressive state depo does not worsen their mood and may be associated with an improvement in affect over a period of one year.

Civic et al, (2000), also researched depo-provera use and depression. They found that practitioners have often reported depression and young users of depo, although this has not been found in research and clinical trials. This study further looked at women who had stressful or chaotic lives that were more likely to be depressed, and due to this were more likely to choose depo as a contraceptive that is reliable and long acting. They concluded it was likely depression was more linked to situational causes rather than biological ones. Edinburgh & Saewyc, (2009), have shown that when working with runaway, sexually exploited girls in the United States, depo is often the best method of contraception and also they had seen no increase in depressive symptoms amongst this group of young women.

Westoff et al ( 1998), followed 497 women over a one year period and found no increase in depres-

sive symptoms. The women who scored higher in depressive symptoms before starting depo, experienced a decrease in depressive scores during the study. The results from this study suggest that use of depo provera should not exacerbate symptoms with pre-existing depression. Although these findings do not rule out the occurrence of mood changes using depo, they do not support withholding this injectable contraceptive due to concerns regarding possible mood changes. The concluding comments from all studies have found women should be advised that mood changes can occur for all women both positive and negative using depo provera, as in other women on no hormonal contraception or using another method of contraception.

As a Nurse Practitioner working with young people in Taranaki I am often faced with supporting young people in making the right choice for their contraceptive method which is the best option for them at this time in their lives. In all studies researched there has been no evidence to suggest an emergence of depressive symptoms on depo, nor was there any evidence to show significant changes in negative or positive affect. Many of the young people I see have come from a dysfunctional background, have histories of abuse and neglect and have become sexually active at an early age. They are also engaging in other high risk activities including the mis-use of drugs and alcohol. For me these young people do very well on depo provera. Many have a trial of the combined oral contraceptive and have reporting losing it, forgetting to take it or just can't be bothered. Many don't want their caregiver/whanu/parent to know they are sexually active and prefer an injection as no one is about to find their pill in a bedroom drawer. All these factors need to be taken into consideration when supporting a young person with a form of contraception. These studies have shown that a diagnosis of depression should not prevent a young person from having depo provera offered to them as a contraceptive option. Many mental health practitioners are advising young women with a past history of depression to use Yasmin a combined oral contraceptive. For many this is not an option as the cost is around \$120 for 6 months and also means remembering to take a pill every day. Other low cost combined oral contraceptives may be just as effective.

Guillebaud a Professor of Family Planning and Reproduction, London does not see depo provera as a problem to use with women who have had a history of depression. He states that 'any past severe

endogenous depression requires above average support' (2004,p.338). This is not a contraindication to use but as with anyone who has depression, additional support should be in place to monitor their moods.

#### Conclusion

Depressive symptoms are often high in young women, but all studies reviewed have found no increase in depressive symptoms after one year of depo provera use. Concerns that depo may cause mood changes or worsen pre existing depressive symptoms are unfounded and may exclude a large population of adolescents who may potentially benefit from the use of this contraceptive agent. Contraceptive and reproductive health experts advocate the use of depo provera in women regardless of their depressive symptoms. As in any clinical cases, all factors need to be taken into consideration. There is no evidence to suggest an increase in depression when using depo provera. We should not be denying young women of depo provera when this may be a very acceptable and affordable means of contraception for them. It is a discrete, convenient and low maintenance method, ideal for adolescents with or without depression.

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