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MEDPULSE

Interactive Newsletter by Medical Department

Dear Readers,

Season's Greetings !

Contraception in seropositive individuals has to be addressed with a lot of caution and sensitivity. The article included discusses many aspects of the issue and will be very useful in practice.

Article on Injectable Contraceptives discusses about types of injectables as well as myths and realities regarding usage of the same.

Your feedbacks and suggestions are always welcome at medical@fpaindia.org
Happy Reading!

Inside this Issue :

HIV Testing : Should It be Mandatory in our clinics ?

When a client comes to clinic for any invasive or non invasive SRH service like MTP or TL, the question that arises is whether it is mandatory to do HIV testing. The answer due to common sense is 'NO'. However many times ,even in health care providers we have a phobic response which is YES . The point that needs to be observed is that a phobic response cannot be seen as a scientific fact and needs to be treated such.

What really helps prevent transmission of infection is observing universal precautions which are meant to be observed with every client with or without history of high risk behavior. The observation of universal precautions dose not depend on clients' HIV reports. A negative HIV test instills a false sense of confidence in the medical staff while the client may be in the window period. Hence a test report can never be substituted for universal precautions.

The fact that the HIV virus is a fragile virus which cannot live for a long time outside the human body. The measurable risk of HIV, hepatitis B or hepatitis C from casual contact of blood with intact skin requires that infected blood get into the blood stream or under the skin. One doesn't catch blood borne viruses by just getting blood on clothing or intact skin. .

Mandatory HIV testing along with causing inconvenience to the client, and may cause the client not to take service from the centre but is also a gross violation of client rights . On the flip side, if a patient had a HIV negative test would that motivate the physician to be careless and spill blood over himself or be even more careless and inject him with blood?

Deep seated anxieties typically are resolved by reasoned analysis or intellectual understanding. Hence it is desirable to reacquaint oneself with modes of transmission and the factual data of HIV instead of having a fearful mentality regarding the same. This small write up would shake us out of our mindset and motivate us to get more factual information about HIV and treat our clients without fairly without any fear as it is this fear based mentality which insists on mandatory HIV testing.

New Medical Team at FPAI HQ

Dr. Shamala Dupte (MBBS, MD– PSM) has joined as Asst Director Medical.
She is a post graduate in Preventive and Social Medicine from KEM Hospital, Mumbai. She has been working in the field of Public Health since last ten years. She has mainly worked in the field of Malnutrition, Anemia, Adolescent health issues, Maternal and Child health and ,TB and HIV AIDS.

CONTRACEPTIVES FOR SEROPOSITIVE INDIVIDUALS

Contraceptive choices in seropositive individuals have to be made in context of preventing transmission of HIV and other sexually transmitted infections, interactions with antiretroviral drugs, risk of cardiovascular and other relevant complications which may take place due to progress of the disease coupled with side effects of antiretroviral drugs. Desire to become pregnant in the future is again an important issue in both sero-concordant and sero –discordant couples. Health professionals must enable all reproductive choices and prescribe appropriate contraception provision at the time of HIV post test counseling and during follow ups.

Contraceptives that can be used in seropositives

- Barrier
- Hormonal
- Spermicides
- IUD

BARRIER CONTRACEPTIVES:

These are considered the most advantageous as they prevent Horizontal transmission of HIV to a seronegative partner, Transmission of resistant virus to a seropositive partner, Risk of acquisition of other STIs including high risk human papillomavirus (HPV), Unwanted pregnancy.

The main barrier contraceptives are the male condom, the female condom, diaphragms, vimules and caps. In present article, we will deal with male and female condoms as the other barrier methods are not in use anymore.

Male condoms:

There are **three** main **types** of male condoms – **latex, polyurethane** and **animal tissue** (Not used anymore)**. Latex rubber condoms** are the most widely used worldwide. Latex condoms are known to be the most resistant to damage and breakage. However these condoms break or loose elasticity when used with oil-based substances as lubricants such as petroleum jelly, cooking oil, baby oil, mineral oil, skin lotions, suntan lotions, cold creams, butter or margarine. It is noted that vaginal yeast infection medications may weaken this type of condoms. Hence only water based lubricants like KY jelly and Astroglide should be advised. Major types of latex condoms that are available are dry (Nirodh) , pre lubricated (Durex, Kohinoor pink) and spermicidal (Share, Rakshak). Average life span of a condom is five years but it is advisable to use it within three years of manufacture. Some individuals have allergic irritation to latex condoms. Such people should choose **polyurethane (plastic) condoms** that are also as efficient but are more expensive than latex condoms. Also polyurethrane condoms are not as sensitive to temperature and ultraviolet light (and so has less rigid storage requirements and a longer shelf life), can be used with oil-based lubricants and does not have an odor.

Condoms lubricated with spermicide (nonoxynol-9 a spermicidal) have no additional benefit in preventing pregnancy, have a shorter shelf life, and may cause urinary tract infections in women. In contrast, application of separately packaged spermicide *is* believed to increase the contraceptive efficacy of condoms.

The only contraindications for use of condom are penile malformations, psychological unacceptability and latex allergy.

Stress must be laid on **consistent and correct condom use** of condoms which means using a fresh condom of the right size for each new act of intercourse. Correct use of condom includes 1) unrolling condom of right size and within expiry date on an erect penis 2) leaving half an inch air free space at the tip 3) removing the condom firmly holding base soon after discharge.4) disposing condom with proper precautions. Condoms should not be pretested by inflating as it increases chances of rupture. Breakage of condom is associated with quality and conditions of condom and method of putting it on. Slippage is associated mostly with lack of experience, knowledge and circumcision status of the user. Double bagging condoms or using two condoms actually increases the risk of worse transmission of HIV or getting pregnant. When the two condoms rub against each other during sex, the fric-tion can create little rips in the latex, and the condom is more likely to break. One condom, used correctly, will provide 98% effective protection against pregnancy. So there's no need to double up! Statistics indicate that India has high rate of condom failure - around 20 percent where the failure rate in other countries is around 2 percent. "While incorrect usage is one of the reasons, there is also condom slippage or tear, which is associated with the size of the condom in relation to an erect penis," said Dr Chander Puri, a reproductive health expert at ICMR and a Core MAP member at FPAI. Therefore while prescribing condom, correct and consistent use must be thoroughly explained along with the advantages.

Female condom:

Female condom is a polyurethrane sheath with two rings at both ends. It is much thinner than latex, odorless, causes no allergic reactions, and may be used with oil-based and water-based lubricants. It comes with expiry after five years after manufacture. Advantages of FC are It does not constrict penis and transfers body heat. It can be inserted as early as eight hours prior to intercourse so is not dependent on male compliance and erection, and does not require immediate withdrawal after ejaculation. This gives female partner some negotiating power to protect herself from infection. Contrary to popular belief, it does not hamper the pleasure of sex in any way for both the male and the female. However it is very expensive. It is manufactured by Hindustan Latex and the MRP is approx. Rs.100 per condom. It is made available to female sex workers at around Rs. 3.50 per condom under social marketing. High cost compels reuse of the condom many times which actually increases risk of transmission among customers. WHO convened a consultation in 2002 and came out with a protocol for reuse of Female condoms. It states that a FC condom can be reused at the most five times with proper disinfection. It gives details of the steps of disinfection, washing, inspection, storage and re-lubrication of the FC before reuse. This has remarkably reduced the cost. But still it is not commonly used in India due to lack of awareness and high cost. Cases of slipping are seen of the condom as there is only one size available.

FC and male condom should not be used together as friction between plastic and latex may cause tear.

Multiple factors influence condom use :

Obstacles to greater use of condoms include lack of availability, fear of being perceived as having multiple partners and being unfaithful to a regular partner, opposition on religious grounds and male dominance in decision making. Women living with HIV infection may feel unable to disclose their HIV status and negotiate condom use with new sexual partners for fear of abandonment, domestic violence, loss of economic support and social isolation .The issues around female condom use are also negotiating barrier method use, method acceptability by users and higher cost compared with the male condom. All these factors must be considered and at the time of counseling, all the fears and anxieties in user's minds should be allayed.

HORMONAL CONTRACEPTION:

This is used as a part of the dual protection in both sero concordant and sero discordant couples. However special care has to be taken while using progesterone in HIV positive individuals as these drugs cause thinning of the vaginal epithelium causing micro trauma during sex .Both ART drugs and OCPs are metabolized in the liver. Drugs like nevirapine and ritonavir cause increased metabolism of hormonal contraceptives lowering plasma concentrations. Whether such reduced hormone levels affect contraceptive effectiveness is unclear because no studies are conducted on this. But, anticipating that reduced hormone levels might affect contraceptive effectiveness, some providers recommend prescribing COCs containing 50 micrograms of estrogen rather than the usual 30- or 35-microgram dose for women on enzyme-inducing ARV drugs.

Spermicides ; Two types of spermicides are considered here.

- Nonoxynol-9 (N-9) spermicide provides no protection against sexually transmitted infections including HIV and frequent use increases the risk of HIV acquisition due to microscopic vaginal and cervical ulcerations caused by the spermicide which leaves the mucosa vulnerable to invasion by the virus.
- Tenofovir(Ant-retroviral) is being used in clinical trials as a spermicide and is proving effective in preventing HIV transmission .However it is not yet available in the market.

Intra Uterine Devices : They are contraindicated in seropositive individuals as sexual transmission of HIV in IUD users may be increased as a result of increased volume and duration of menses, genital inflammation and microtrauma to the penile epithelium by the IUD threads.

References:

Contraceptive choice for HIV positive women by HS Mitchell, E Stephens

Review of priorities in research Hormonal Contraception and IUD and HIV infection –WHO technical meeting, Geneva

Contraception, past, present and future by Mandakini parihar and Ashwini Bhalerao Gandhi

Injectable Contraceptives

The first injectable contraceptive was developed in 1953 in US. After a series of trials spanning 26 years ,WHO recommended DMPA (Depot Medroxy Progesterone, Acetate) as a contraceptive agent in 1979. In India it was approved by the Drug Controller of India, contingent on the completion of post-marketing surveillance study of users in 1993. Owing to the 13 % of unmet need of contraception in India, inclusion of injectables in the basket of choices for contraceptives is the need of the hour. Even though it is available only through private sector, NFHS III shows that 0.1 % of contraceptive users in India use injectables. These are purely from private sector and the most commonly used injectable is DMPA. GOI has yet not included injectables in National Program to be available at large scale at no or subsidized cost.

Till now two types of injectable contraceptives have been developed

1. Progesterone only injectables *2. Combined injectables*

In India, there has been a strong opposition to injectable contraceptives from women's groups till now. The major reasons that are cited are heavy bleeding, bone mineral density loss and failure to prevent STIs including HIV transmission. Practically, no hormonal contraceptive is free of side effects. Injectables have many advantages as well as disadvantages like other contraceptives. Advantages that injectables have over other methods apart from clinical advantages are that, amenorrhea sometimes caused by injectables may turn out to be beneficial to Indian women who already show a trend of more than more than fifty percent anemia. The injection needs to be given after screening the client medically. Also for every injection, the client needs to visit the health facility. This will enhance her number of contacts with health care providers which will definitely have a positive impact on her health as well as better client monitoring can be done for any possible side effects. This is a distinct advantage of injectables. Fear of spread of infections like HIV through injections is baseless in front of national immunization program which is being implemented since more than thirty years. The new cafeteria approach demands inclusion of new contraceptive methods for women to have a wider choice available. Access to safe and low cost injectables designates execution of their right to choices, access and health. Also there are women who would be unable to use oestrogen based methods or IUD, Injectable contraceptives offers them a safer option.

References:*1. NFHS III (2005-6) 2. Contraception , Past Present and Future, FOGSI publications. 2006*

Injectable Contraceptives at a glance

Type	*Content*	*Approval and Availability in India*	*Trade name*	*Formulation*	*Dose*	*Window period*	*Return to fertility*
Progesterone only injectables	Depot Medroxy Progesterone Acetate (DMPA)	Approved and available through private sector	Depo Provera	150 mg of DMPA in 1 ml ampoule	One Injection every 12 weeks	2 week	9 to 10 months
	Norethistharone enanthate (NET EN)	Approved and available through private sector	Noristerat or Net en	200mg of net en in 1 ml ampoule	One Injection every 8 weeks	3 to 5 days	3 to 4 months
Combined Injectables	Cyclofem	Approved for preprogram introduction, not available	Cyclofem	25mg of MPA +5 mg estradiol cypionate	One Injection every 4 weeks	3 to 5 days	3 to 4 months
	Mesigyna	Not approved not available	Mesigyna	50mg NET EN + 5mg estradiol valerate	One Injection every 4 weeks	3 to 5 days	5 months