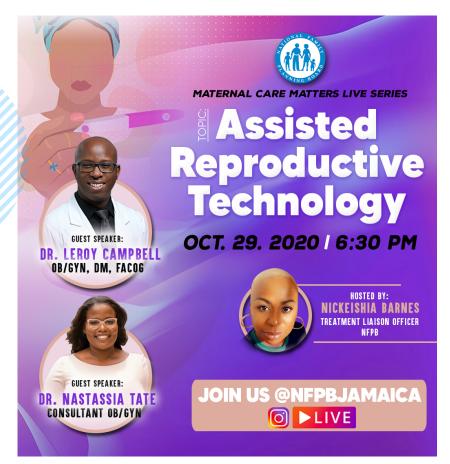


THE HEALTH PROVIDER

THE OFFICIAL NFPB NEWSLETTER

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Editorial:

Last quarter the National Family Planning Board's Health Provider Newsletter focused on Infertility and Assisted Reproductive Technology (ART) based on the agency's Instagram Live Series 'Sex and You'. Guest presenters were Dr. Nastasia Tate, Consultant Obstetrician and Gynaecologist and Dr. Leroy Campbell, Obstetrician and Gynaecologist. As promised, the continued coverage of the informative exchange that was moderated by Miss Nickeishia Barnes, Behaviour Change Coordinator – Public/Private, NFPB, is captured in this edition of the newsletter. Dr. Campbell's contribution is again paraphrased and condensed.

Connecting with audiences during the pandemic involved the NFPB's use of popular live chats. In mid- November 2020, we hosted the

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Maternal Care Matters Live Series that continued the discussion on ART. Dr. Vernon DaCosta, Director, Hugh Wynter Fertility Management Unit (HWFMU), University of the West Indies, was our specially invited presenter. The moderator of the session was Mr. Devon Gabourel, Director, Enabling Environment and Human Rights at the NFPB. Yet another comprehensive, vibrant and balanced conversation ensued looking at ART with great emphasis on the male partner.

This newsletter is definitely a keepsake as it captures your questions and the responses from the medical consultants.

Enjoy and share its content.

Q. What are some of the procedures a patient would have to be tested for to see if they are infertile?

A: (Response continued) If the tubes are obstructed the options may vary and IVF may be the best option. If a local obstruction, surgery may be done involving excising the area and reconnecting the tubes. But this method does not always produce similar successes to IVF.

IVF really involves stimulating a woman to produce eggs, harvesting those eggs, taking the sperm from a partner or donor, putting them together in a lab to fertilise them and placing the fertilised egg into the womb directly.

This may also be an option if the problem is associated with the male, for example if his sperm count is low. You can appreciate that it takes lots of active, highly motile sperm trying to find and fertilise one egg. The sperm that finds the egg lives, the others die. The less sperm a man has, the probability of fertilising an egg is reduced. Having a low sperm count does not mean you cannot conceive, it reduces the probability. IVF in this case can increase the probability. Medication or lifestyle changes can sometimes help.

Secondly, surrogacy is considered as an option for childbearing when the patient cannot carry the pregnancy because of risk or inconvenience to the woman who is trying to conceive.

Surrogacy involves someone else, a third party, who is healthy and willing, acting as a carrier for the pregnancy. Surrogates also assist where a woman has an abnormality of the womb (from birth or as a result of surgery) but she has healthy eggs that are then fertilised with the patient's partner's sperm. If the patient has a medical condition that is life threatening (that can cause major complications or death), such as severe heart disease, a surrogate can be

considered and the IVF technique will be used.

Thirdly, 'donor eggs' refers to using someone else's eggs. Donor eggs may be needed in circumstances where any of the following factors may prove problematic – age, an underlying condition has caused damage to the ovaries either from birth or due to medication– and so her eggs are unhealthy or unable to stimulate enough eggs.

Age is the most common reason as couples are aware of the possibility of foetal abnormality as the quality and quantity of eggs is reduced. When they do get pregnant there is a higher risk of miscarriage and of congenital abnormalities or aneproids (conditions like Down's Syndrome). In order to increase their chances of having a baby they may opt for donor eggs or surrogacy.

Q. What would be some of the costs attached to having to do the fulsome check to see if you are experiencing infertility and then assisted reproductive technology.

A.The expenditure will differ from patient to patient. It is important that the obstetrician and gynaecologist be consulted for a determination of one's health challenge. From there the doctor can break down the steps that need to be taken for treatment, from which an idea of the cost can be ascertained.

Certainly there is a test that needs to be done. The number and specificity of the test varies from person-to-person; clinician fees; and IVF.

Q. If a woman has a history of ruptured cysts, and has a period monthly will it affect her fertility?

A. Cysts are quite common in young women. Most cysts are benign issues and usually reflect what is happening in terms of menstruation. Remember that during the period the egg develops in small cysts that grow and then rupture and release the

egg which we call ovulation. The cyst is a little fluid-filled area like a bubble in the ovaries. Simple cysts typically grow, pop and the fluid leaks out not causing any issues. With most simple cysts, if they are growing, doctors will observe them and let them resolve on their own.

However, for the cysts exhibiting features it warrants more concern. The ultrasound may reveal it is a complex cyst or a complex cyst with other things within it, not just fluid, for which further investigation is required.

Based on the query it is more than likely simple cysts and does not pose a problem to fertility. The individual is more than likely ovulating.

In some cases where a woman has polycystic ovarian syndrome (POS) or a hormonal imbalance (an umbrella phrase) the ultrasound will reveal polycystic ovaries a condition where you have many small cysts, and the gynaecologist has to do further investigations to see if it is due to a hormonal imbalance such as POS which can be associated with reduced fertility.

Q. Should women be looking at the frequency of pap smears?

A. Yes, because cervical cancer is the number one gynaecological related cause of death in Jamaica. If women do a pap smear once every three (3) years the country can reduce cervical cancer by as much as 90 per cent. A pap smear is a simple screening process that takes less than five (5) minutes. Evidence shows many women who present with cervical cancer invariably have either never had a pap smear done or have not complied with screening protocols.

Q. If someone is very young and has had 3 or 4 children what are the implications for that person's fertility?

A. When a tubal ligation (commonly called T/L or 'tie off') is done it is meant to be a permanent procedure to prevent further pregnancies. When a young person wants a T/L they make long term decisions off of short term experiences. The young woman shows up years later with a new partner and wants the process reversed. Women sometimes make the decision after a tragic circumstance. A challenge is when they change their minds and want it 'pulled'. Reversal of the procedure is not always successful.

Clinicians need to recognise and respect the woman's rights to her own reproductive health. She has a right to declare what she wants. Appropriate and clear dialogue to explain the implications, and contraceptive options to space her pregnancies are paramount.

Q. Is Unipearl good or bad?

A. Herbal preparations have been marketed for vaginal health and freshness. They are placed in the vagina for 12 to 24 hours and then they are removed. It should be remembered that the vagina cleans itself so there is no need for anything to be placed in it to clean it. Oftentimes, by introducing products it makes the condition worse by introducing bacteria/microorganisms /germs that cause problems. Gynaecologists do not recommend putting things into the vagina for example douches etcetera unless medically supervised.

Q. What can a woman do about hormonal imbalance?

A. POS is usually the most common reason that happens as she gets older and puts on weight. Some women have an abnormal response to weight gain, and they react abnormally to certain hormones. By reducing body fat some of the changes can be reversed. It necessitates seeking out a lifestyle that works for you. Commonly these women are able to do well and conceive.

Hyperprolactinemia is a hormone that permits the breast to produce milk. Elevated levels of prolactin can block and disrupt the menstrual function resulting in issues with menstrual cycle, fertility, or the breast milk. The O&G needs to try and understand why the hormone level is elevated and the women can conceive without further therapy.

Q. Do fibroids affect fertility?

A: This is a yes or no answer. By themselves fibroids do not cause infertility. However, yes if the challenge is with the size and location of the fibroids, for example large ones if they are compressing or blocking the fallopian tubes then the egg can't meet the sperm thus causing trouble.

Q. Can infertility affect menopause?A. When a woman goes into menopause. -

Infertility has a wide range of underlying causes including premature ovarian failure, so for some women against background of genetic issues or treatment received early in life (e.g. chemo) that can affect the ovaries. Essentially the eggs when being developed release oestogen, stimulate lining of womb to grow and shed monthly if fertilisation does not occur.

Menopause is a reflection of the cessation of egg production, or their non-functioning pushing the woman into menopause earlier.

If the woman is 35 years or onward, the Obstetrician and Gynaecologist can do any of a number of simple tests at any point in the woman's cycle to check for ovarian reserve to see how many eggs remain.

How she experiences menopause? It depends on how rapidly it occurs. Typically, a woman may experience symptoms of hot flashes, moodiness, vaginal dryness for which the severity varies from woman to woman and may not be affected by

the underlying fertility.

Q. What is one gem or one nugget around issues of infertility that you would like to leave with our audience that is hope-filled should they be faced with the issue?

A. It's not the end of the world, many are experiencing similar challenges. There is help for most cases.

Secondly, our negative experiences open the door for benefits and positive experiences for others. Many children are looking for loving parents who can provide love, care, support and a happy home.

Q. What are the lifestyle changes a woman may undertake if she decides to delay childbearing to her mid30's onward?

A. While it is good to look at lifestyle changes in the context of childbearing maintaining our health is important.

Also, the best gift a woman can give her children is her being in the best physical shape, observing good nutrition, getting adequate rest, maintaining good mental health. All are important.

Medicine can help with the option of preserving eggs and banking of embryos and storage is available in Jamaica at the Hugh Wynter Fertility Management Unit.

Q. How soon would you suggest a nulliparous do a pap smear if sexually active?

A. Screening according to the MoH is at 18 years and International guidelines at age 21. However the prevalence of cervical cancer in the society sees doctors not turning away women younger than 18 and who are in need of screening.



ASSISTED REPRODUCTIVE TECHNOLOGY – MALE FERTILTY ISSUES

Guest Dr. Vernon DaCosta, Director, Hugh Wynter Fertility Management Unit

Q. What is the Hugh Wynter Fertility Management Unit (HWFMU) all about?

A. The HWFMU, a centre of the University of the West Indies, and located on the grounds of the adjoining hospital, was founded in 1978 by Professor the Honourable Hugh Wynter. At that time they mainly concentrated on contraceptive technologies where doctors across the Caribbean were trained in how to deliver contraception. Around the year 2000, assisted reproductive technologies (ART) was introduced to the unit and continues to this day.

The HWFMU's first IVF baby was born in 2001.

Q. What is ART or Advanced Reproductive Therapy all about?

A. In the field of infertility, it is referred to as assisted reproductive technology (ART) and is a group of treatment for infertility that deals with the handling of both the egg and the sperm in a laboratory. The procedures include IVF, another

called Intracytoplasmic Sperm Injection (ICSI) where one sperm is injected directly into one egg and is mainly used in men who have a severe reduction in their sperm count or an abnormality in the motility of their sperm. In men who are azoospermic (that is, not having sperm in the ejaculate) this can be used to have their own biological child.

The technical definition of ART means you have to be dealing with both the sperm and the egg. For example, intrauterine insemination where the sperm is washed, prepared and injected into the uterus is

not a part of ART. In this case you are manipulating the sperm. But is a form of assisted conception.

Some other techniques are cryopreservation of embryos, pre-implantation genetic testing that is when the embryo is developing a few of its cells are taken and tested for abnormalities in the genetic makeup of that embryo. That way one can remove all abnormal embryos before they are reintroduced into the uterus. This procedure has two main effects – improving on the success of the pregnancy and also decreases the number of miscarriages occurring after IVF.

Q. Does it only apply to women? Is there an increase in demand in Jamaica for ART? Is the technique only for older men, older women or older couples? What is the need and why is there a need for it?

A. Since the invention of IVF, over 7 million babies have been born worldwide using the technique, the first baby was born in 1978. It is not just for women, as half of couples presenting for IVF the problem is one of male infertility – decreased sperm count or decreased motility.

The HWFMU conducted a study on attitudes of men to masturbation and because men are reluctant to masturbate and provide a sample for testing there is a delay in diagnosis of infertility in a lot of women. As women get older their chance of getting pregnant decreases. In fact for the woman who is over age 37 the chance of getting pregnant diminishes rapidly. Which is why it is important that men provide the sample.

As men get older, especially after age 40, their sperm count also decreases. Although males can still have children in their 60s naturally when compared to their sperm count at age 20, it is significantly less. The decrease in sperm is also significant moving from say 100 million, and after age 40 it falls to 50 million, and then to the critical limit of 20 million per male at which point they begin to show signs of sub-fertility.

Q. Are you seeing an upward trend or is it something for the wealthy?

A. It is definitely not for the wealthy. All communities are affected. It is not limited to one set of individuals. Infertility affects all strata of individuals.

Q. Are these services available in public facilities or is it still private here in Jamaica.

A. It is still private but it is subsidized by the UWI. The cost to the patient is subsidized. When the HWFMU compares its price to other countries for example the USA they charge twice or three times what is being charged in Jamaica.

In response to the question, these services are not available in the private sector, but when patients are referred, the HWFMU tries to accommodate them. They have been speaking with insurance companies, as they don't cover infertility treatment and fertility treatment is a human right and it should be looked at as any other disease – hypertension, diabetes – so the insurance

companies should provide coverage.

Q. Are they (insurance companies) amenable to the idea? What is the resistance?

A. It is being considered. The HWFMU has also approached banks. Luckily there is one on board that offers unsecured loans for infertility treatment.

Q. Have people been taking up the offer?

A. Yes, people have been taking up the offer. The HWFMU came to the agreement in early 2019, and 31 or 32 couples have taken up the offer so far.

Q. Can I refer directly or does the client have to be referred by an OB/GYN?

A. No they don't have to be referred by an OB/GYN. They can call the unit directly where an appointment will be made for them to see a fertility specialist as sometimes they don't need AT but instead require a minimal invasive gynaecological surgery. Once they do the surgery they tend to get pregnant naturally.

If it is found that they need ART they are sent to the Unit for the specific treatment that they need.

Q. Are you open now during COVID?

A. Yes we are but there are special conditions where patients are tested before starting and during treatment to ensure they are not OCVID positive. The effect of COVID on the pregnancy? So far it doesn't seem to have much effect. If they are COVID positive the HWFMU will not start treatment. If they become COVID positive during the treatment cycle it would be cancelled. Persons with a negative result are advised to quarantine themselves for if they pick up COVID it may work out a bit more expensive for them.

Q. What role do midwives play in ART, if any?

A. Midwives don't play a direct role in ART treatment. But their role is very important as they can advise patients who are having difficulty getting pregnant on the importance of starting on treatment early. Because women tend to believe that once they are seeing a period they are fertile, and they can delay getting treatment thinking that they can become pregnant. But it is recognized that after age 35 it's a sharp decline in fertility. Even younger patients can have what is called Low Ovarian Reserve and if it is picked up they go into menopause earlier. These women need to consult a fertility specialist doctor. If they are found to have Low Ovarian Reserve they are called in and advised that they have to act on their infertility immediately.

Q. Is HWFMU the only option offering this technology?

A. Currently they are the only centre in Jamaica. COVID has caused changes in the way they practice. To accommodate rural patients, Zoom consultations and satellite stations with doctors are facilitated. The patient works with the doctor and at the appropriate time they visit the HWFMU. This also reduces the amount of travel and the greater risk of travel associated with COVID.

Q. Do you do assisted hatching, electric or vibratory stimulation to achieve ejaculation (44:47) tose kind of therapies?

A. At HWFMU the entire gamut of ART is provided. Electro stimulation – which is usually done to assist men who are paraplegic or have spinal cord issues, or for those who cannot masturbate – is not done at the unit. Freezing is done of egg, sperm, embryos. Individuals and couples that want to delay having children and are growing older are advised to go in and freeze their sperm or egg. Oncofertility is also offered by the Unit for patients diagnosed with some form of cancer. Women with breast cancer would be seen at the

HWFMU before they start their cancer treatment (chemotherapy, radiotherapy) as their treatment can result in menopause as their ovaries can be destroyed. Once they are cancer-free then they can come in and complete their families.

Q. Is sperm washing available? Do you have those other facilities for persons with other chronic diseases?

A. HWFMU does have the technology. Couples are seen where one partner is HIV positive and the other is negative. For them the safest way to prevent the transmission of HIV is to do IVF with ICSI.

The patient is checked by a physician to ensure their HIV is under control and viral load is undetectable/very low. They are then brought in for IVF. Sperm is collected, semen is tested for HIV using the Polymerase Chair Reaction (PCR) technology. As there is a slight possibility of infection partners are made aware of the risks. The partner is put on antiviral medication, preexposure prophylaxis, as there is a slight possibility the partner can be affected. This way the partner does not contract HIV.

Q. Apart from IVF, what are the more popular or more sought after therapies or technologies in Jamaica?

A. There is intrauterine insemination which is usually indicated when the female is perfectly normal but the male partner has low sperm count or low motility. Sperm collected, washed, prepared (that is removal of the abnormal or slow sperm and sorting out the fast moving normal ones) and at the time of ovulation they are injected back into the uterine cavity.

Approximately 40–50 percent of the time there is a problem it is attributed to the men. Therefore, men should come in and get tested.

SOCIAL DISTANCING GUIDELINES AT WORK



