Dear Friends,

Greetings from IFS. At the outset let us pay our heartfelt condolences to all families who have lost their near & dear once in the devastating tragedy of Uttarakhand. May their soul rest in peace & almighty gives strength to bear the loss to family.

Fertilization – 2013 preparations are in full swing an excellent scientific programme is being designed for all of you. Take the advantage of early bird registration, so register now. You can log on to our website Fertilization-2013, for latest updates, details of workshop & Abstract submission details. Enroll yourself for various awards & prizes by sending your research work. Various academic activities are planned for 2013. Please see the upcoming events at our website. So you can take the advantage of these CME’s.

I again request all of you to enroll atleast one new member in IFS in the month of July.

Dr Kuldeep Jain,
President, IFS

President’s Message

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From the Desk of the Web Editors…

Dear Members,

This issue brings forth the debate on the recent issue in news about surrogacy. With India coming out with the ART bill very soon, these are issues which have to be addressed by the ART bill with recent changes added in 2013. We have to come together with a consensus.

The issue also covers the active participation of IFS in the COGI conference at Turkey in June 2013.

We also invite members to give their viewpoints on issues discussed here as each opinion counts and contributes towards better regulations for our country.

Dr Mangala Telang
Dr Surveen Ghumman Sindhu
**Viewpoints on Legal, Ethical and Regulatory Issues**

Dear Readers,

The last issue discussed controversies like whether infertility should be given the status of a human right, stage at which embryo should be considered a person and whether access to genetic heritage is a personal right. This issue asks the experts the following questions:

**Question:** In recent developments of surrogacy and ART regulations in India should a public opinion be sought like UK did and is India ready for such democracy in ART?

**Question:** In India there is no fixed sum for donors. Do we need to define donor compensation in terms of a fixed amount?

**Question:** In countries where child can be informed about donor identity what would you consider the best age at which it should be done?

**Opinion of the Experts On These Issues....**

**Dr Kanan Dev Nayar**  
Treasurer, IFS

**Question:** In recent developments of surrogacy and ART regulations in India should a public opinion be sought like UK did and is India ready for such democracy in ART?

Yes, in view of rising awareness and literacy rate, public opinion should be sought and opinion taken as to what our population feel regarding surrogacy and ART regulations. A clinician and an ART centre left on their own, can be biased regarding surrogacy and guided by money for deciding these matters.

**Question:** In India there is no fixed sum for donors. Do we need to define donor compensation in terms of a fixed amount?

Yes, there should be a fixed minimum sum for donors. Donors could be inspired by high returns from this option without thinking about the sincerity and sensitivity of work. Donors should be mentally strong enough to understand their role in entire process and secrecy, which they need to maintain. It has become a money making business, so fixing the amount would make the process more transparent and prevent the agencies providing the donors from become more and more greedy. This will also prevent exploitation of poor women, who do this just for feeding their family.

**Question:** In countries where child can be informed about donor identity what would you consider the best age at which it should be done?

It is debatable, around 25 years is an optimal age according to us to know identity of donor, as he has achieved sufficient maturity & stability in life. But in consultation with a psychologist who can analyse mental status and maturity of person to understand entire process.

**Dr Rashmi Sharma**  
Executive member, IFS

**Question:** In recent developments of surrogacy and ART regulations in India should a public opinion be sought like UK did and is India ready for such democracy in ART?

Yes a public opinion is always welcome. These days many patients in India are quite educated and well informed thanks to the technology of internet. These patient opinions should be sought on many issues like whether known surrogates from the family should be allowed or whether known donors from the family or friends should be allowed?

**Question:** In India there is no fixed sum for donors. Do we need to define donor compensation in terms of a fixed amount?

Yes in my opinion not only for donors but also for surrogates, a fixed sum should be defined by the law. It will be helpful in delivering the deserved amount to the donors and surrogates and will curb the practice of a good share of money going in the pocket of middleman involved. Also for the patients there would be clarity and transparency in the whole system.

**Question:** In countries where child can be informed about donor identity what would you consider the best age at which it should be done?

At least 18 years of age. At an age lesser than this we would be confusing an immature mind.
Creation of human embryonic stem cells from cloning – The first of its kind

Embryonic stem cells have been created from human skin cells for the first time by US scientists using a cloning technique and can be used to treat people with degenerative diseases. The advantage is that because the cells are genetically identical to the patient, they should not be rejected in the way that transplanted organs can be. The study was carried out by Dr Shoukhrat Mitalipov, from Oregon Health and Science University, USA. A technique known as somatic cell nuclear transfer (SCNT), was used where the genetic material taken from skin cells replaces the genetic material of a donor egg and develop embryos that generate embryonic stem cell lines genetically identical to the donor skin cells. SCNT has been used successfully in several animals but in generating human embryos by SCNT, the embryos did not survive long enough to generate embryonic stem cells. Use of embryos is controversial and reproductive cloning is not allowed. However, this research is more to combat disease. The next step in this research is a comparison of SCNT with currently used induced pluripotent stem (iPS) cells which are created by taking adult cells and exposing them to conditions under which they can revert to stem cells, without needing to use embryos.

Mitochondrial replacement – An answer to oocyte aging.

David Sinclair, a Harvard Medical School scientist has proposed a way to rejuvenate aging human eggs. It is now being believed that it is the mitochondrial aging which causes the oocyte to age. Aging causes a decrease in number of mitochondria with lowered efficiency of organelles. Cytoplasmin from a younger woman's eggs (containing her mitochondria and its mitochondrial DNA) is taken and injected into the cytoplasm of an older woman's egg. The oocyte can be made to behave younger by replacing the mitochondria in the older woman's eggs with those of a younger women. Ovarian stem cells, in adult women of reproductive age, could also supply the mitochondrial vigor they need to conceive later in life. Sinclair and his colleagues have filed for patent rights to techniques based on this research called Autologous Germline Mitochondrial Energy Transfer, or ‘AUGMENT’ This could be the answer to women who do not want to use an egg donor and insist on a genetic baby of their own.

Pedophillic – Can he be allowed surrogacy as a single male?

An Israeli paedophile, who has served a year-and-a-half in jail for sexually abusing children, managed to adopt a four-year-old girl through an arrangement with a surrogate mother in India. The Indian government can not intervene as the child is an Israeli citizen. Israel cannot do much as child is legally his. The man has been kept under observation though and ordered to undergo psychological counselling. The laws which have been put forward in the 2010 ART Bill, only concentrate on protecting the rights of a surrogate mother or the commissioning parents. However a third angle is to be protected: the child. Adoption rules are well defined in India by the central adoption resource authority. Prospective parents should be able to bring up the child, and should be in good health. Single male cannot adopt a girl child. However ART guidelines currently being followed allow a single male access to treatment with a surrogate. There is no guarantee that it will be a male child. No background check is made and the client being a pedophile does not interfere with them being able to take care of the child born through surrogacy as laws do not state so.

Question: Recent modifications of surrogacy rules for foreigners allows only couples married for 2 years to access facilities of ART as a stable marriage is necessary. Should single parent surrogacy be allowed when live in couples and gays are not allowed? Or should the rules be modified to also allow live in and gays the access to this treatment.

Landmark judgment of the Australian court for the rights of a sex offender availing IVF treatment

A court in the state of Victoria, Australia, has allowed a previously convicted sex offender and his partner to have access to IVF treatment in June 2013. The sexual offences were against a 16-year old girl with learning difficulties who was under his care. He
was under custody for a year, and was placed on the Sex Offenders Register for 15 years. Under the Assisted Reproductive Treatment Act 2008, if a criminal record check reveals that charges have been proven against a women or her partner for a sexual offence, there is a presumption against providing treatment. The court felt that after undergoing therapy program for sex offenders he was not a potential threat and his partner and he were happily married with extensive family support. Also his alcoholism was now under control. The court sanctioned an IVF treatment as it felt there was no potential harm to the child. ART Bill 2010 has not stated what the status of a sex offender is while availing ART treatment.

**Question:** Like with adoption should it be important to ensure that commissioning parents are capable of bringing up the child by ruling out alcoholism, addictions, sexual offence history, and lack of family support. Considering the above two cases - Is it important to do a background check of criminal records for all foreigners availing ART, just as it is required now that they must produce proof of marriage for 2 years.

**Postmenopausal women – surrogates or donors of their own cryopreserved oocytes?**

As yet no woman has conceived after natural menopause with her own previously removed and frozen eggs. That is because the process of freezing eggs and then successfully thawing them and using them to achieve pregnancy has not been in use long enough. In the coming decades more women may freeze their eggs when they are about 35 for later use maybe even after they achieve natural menopause— though that pregnancy has higher risks after menopause. Since the time is not far when these issues may come up regulations need to be defined.

**Question:** Would such a woman be considered a surrogate for her own oocytes if she decides to have a child at a later stage and would she come under the laws defined for surrogates as far as age and parity are concerned.

**Wastage of embryos – HFEA reveals statistics**

According to the shocking revelation, over 1.7million embryos prepared with the aim of helping women become pregnant have been thrown away since records began 21 years ago as reported by Human Fertilisation and Embryology Authority (HFEA). 3,546,818 human embryos have been created since August 1991. These have produced only 235,480 'gestational sacs' - evidence of successful implantation. As a result, 93 per cent of all embryos created - more than 3.3 million in all - are never used to generate a pregnancy. Of the embryos created, 839,325 were put into storage for future use and 2,071 were stored for donation to others. A further 5,876 were set aside for scientific research. In all, 1,388,443 embryos were implanted in the hope of beginning pregnancies. Just under one in six resulted in a pregnancy. Of the rest, 1,691,090 were discarded unused and a further 23,480 were discarded after being taken out of storage.

**Scotland: Life style changes a prerequisite to state funded IVF**

The Scottish government has approved criteria which include that women under 40 will be offered two courses of IVF treatment funded by NHS Scotland. Those between 40 and 42 years old will qualify for one free cycle after a test to determine their 'ovarian reserve'. To qualify for the free IVF treatment women must have a body mass index between 18.5 and 30, patients being in long-term relationships, ideally co-habiting with their partner for two years before seeking treatment, both partners must not smoke for a minimum of three months before IVF treatment and continue as non-smokers during treatment. Alcohol is also off-limits to both during treatment. Support for life style changes would be provided and a waiting list created. This criterion would be uniform over the country. This has been introduced to balance needs and resources available so as to reduce waiting time for those who are willing to put in a genuine effort to get the best success rates of free treatment availed.

**Fertility treatment for seriously ill patients – Legal Bill**

California is coming up with a bill which will require insurance companies to cover fertility treatment for patients battling cancer and other serious illness. Treatment of cancer would hamper the fertility of the individual. Hence when treatment of these diseases is covered by the insurance company, harvesting and storage of gametes (Sperms or oocytes as the case may be) for
later use must be included in the insurance package. The Assembly passed the measure. The bill now goes to the Senate. Current state law requires insurers to offer coverage for fertility treatments, but it is not required to be included as a benefit in an insurance policy.

**IVF Increases risk of SGA babies and preeclampsia where estrogen levels are high**

Researchers at Massachusetts General Hospital (MGH) support the hypothesis that extremely high estrogen levels at the time of embryo transfer increase the risk of gestational age babies and preeclampsia. It was recommended that each patient's hormonal dosage be adjusted to try and keep her estrogen levels below 3,000 pg/mL. If the estrogen level exceeds this threshold, the patient could be counseled regarding freezing all embryos for transfer in subsequent cycles, when her hormone levels are closer to that of a natural cycle.

**Thromboembolism risk in first trimester increases with IVF**

Researchers at the Karolinska Institute in Sweden have found that women who undergo IVF treatment have a higher risk of suffering thromboembolism and pulmonary embolisms, during the first trimester of their pregnancy. The researchers found that on an average, around 4.2 women of 1,000 women who underwent IVF were diagnosed with venous thromboembolism (VTE) compared to 2.5 women per 1,000 among the normal pregnancies.

**Obesity or low fat diet – Which is more harmful for fertility**

Low-fat and highly processed diet are contributing to infertility and poor health in women. Although obesity lowers chances of pregnancy a low fat diet is not the answer. Low-fat foods have been linked to infertility in both men and women because they don't contain the adequate nutrients.

**Variation in sperm length a reflection of sperm motility**

A study at Brown University reveals that men who produce higher concentrations of competent motile sperm also demonstrate less variation in the size and shape of those sperm. The research suggests that at least in some men, measurable inconsistency in sperm length may be a sign of a problem in spermatogenesis. This could be an indirect marker of testis function.

### Conferences and Events

#### National

1. National Conference + Live workshop on Infertility & Fertility enhancing surgeries named 'FERTIMEET 2013’ to be held on 7th & 8th September 2013 at hotel “The Leela” Gurgaon- Organised by Gurgaon Obst & Gyne Society and Neelkanth Hospital
2. AOGD (Association of Obstetricians and Gynecologist of Delhi) Annual conference on 21st and 22nd September at Delhi
3. Fertivision 2013, Annual Conference of Indian Fertility Society to be held on 6th 7th 8th December 2013 at India Habitat Centre, New Delhi
4. 19th National Conference of Indian Society of Assisted Reproduction (ISAR) to be held from 14th to 16th Feb 2014 at Gujarat University Convention and Exhibition Centre, Ahmedabad

#### International

1. 69th ASRM Annual Meeting to be held Conjoint with IFFS in Boston Exhibition and Convention Centre, Boston, Massachusetts, USA on Oct 12 – 17 th 2013 For more information asrm@asrm.com http://www.asrm.org/IFFS-ASRM2013
2. IVF worldwide live congress Invitrofertilization clinics growing in the digital age at Berlin Germany 31 Oct – 2nd Nov 2013-07-01
3. 5th Asia Pacific Congress on Building Consensus out of Controversies in Gynecology and Infertility (BCGIP-COGI) November 21-24, 2013 Shanghai, China.

IFS Activities

COGI, Conference in Istanbul on 29th May to 2nd June - IFS participates as organizers from India

10th ART Course organized by Jindal IVF Centre under aegis of IFS on 14th to 16th June at Chehel, HP
Level 2 & 3 Infertility Management
Under the aegis of Indian Fertility Society
14th-15th June, 2013
Tarika's Educational Institute (H.P.)
Jindal Academy Specialised Women's Health Home"nGreater Noida West, Noida, Uttar Pradesh

[Image of a conference setting with a panel of speakers and an audience in the background]