Building Families

A Joint IFFS and ISA Scientific Statement

IFFS: International Federation of Fertility and Sterility

ISA: International Society of Andrology

Introduction

This document stems from the desire of two leading global organizations to bring attention to the falling demographics and the need for medical practitioners to act to improve access to care for all infertile couples. Providing equal access for females and males requiring infertility investigations is not only desirable but also achievable. Education of practitioners and education for policymakers combined is needed to ensure excellence in clinical practice for men and women presenting with infertility through adequate budget resource allocation and scientific training of all healthcare providers.

Contraception advice and care is the other side of the coin in human fertility. Both organizations believe that all women and men should equally have access to contraception advice and supplies when a pregnancy is not desired. Access to care varies according to economic, geographical (both rural versus urban as well as among nations), political and cultural factors which need to be considered by scientific and clinical communities, and all stakeholders including policy makers.

The scientific statement presented here aims to be a general guide to practitioners in the field and the start of a renewed global effort to encourage family building as a strategic part of family planning in all countries.

ISA and IFFS have worked in conjunction to develop this Scientific Statement regarding "building families", which requires knowledge of couple sexuality, infertility and contraception. This was reviewed and approved by the ISA and IFFS Boards after consultation with member societies. It targets all healthcare practitioners in the field.

Signed

Washington DC

Date:

Articles

A.	Sexuality
I.	Couple sexuality
1.	A diagnosis of infertility can affect sexual desire in both members of the couple,
	resulting in the development or progression of sexual dysfunction (SD).
2.	Psychological and sexological assessment and follow-up are often unmet needs
	for couples suffering from infertility or undergoing medically assisted reproduction
	(MAR).
3.	While SDs are often secondary to a diagnosis of infertility, some can be a cause of
	infertility deserving diagnosis, adequate treatment and follow-up.
4.	When evaluating both couple members, organic, psychological, relational and
	socioeconomic factors should be considered.
5.	Risk factors for infertility and sexual dysfunction largely overlap (sedentary
	lifestyle, obesity, smoking, alcohol, other substance abuse and environmental
	factors, but also rapid weight loss or extreme physical exercise), suggesting that
	an approach based on lifestyles would be beneficial to both.
6.	Sexual desire loss is common in infertile couples and can be worsened by the use
	of MAR practices and techniques.
7.	SDs are not "a minor nuisance" when dealing with couple infertility, but potential
	early signs or warnings of systemic disorders, severe psychological distress, or
	both.
8.	Sexual dysfunction in one partner can induce or worsen sexual dysfunction in the
	other partner.
9.	Both members of the couple should be involved in the therapeutic management of
	either partner's sexual dysfunction.
II.	Female sexuality
1.	Female sexual health is often overlooked during the investigation of infertility.
2.	Disorders of sexual desire and orgasm are common in women of infertile couples
	and even more in those undergoing MAR.
3.	Distress from sexual dysfunction can result in irregular periods and ovulatory
	dysfunction, decreasing the chances of pregnancy.
III.	Male sexuality
1.	A diagnosis of infertility can result in the development of erectile dysfunction (ED),
	ejaculatory dysfunction, or hypoactive sexual desire disorder (or progression to
	more severe forms).
2.	Erectile or ejaculatory dysfunction can result in an inability to complete sexual
	intercourse, thus lowering the chance of natural conception.
3.	Premature ejaculation does not likely affect the chances of natural pregnancy,
	unless ante-portas (i.e., before penetration occurs).
4.	Anorgasmic anejaculation is generally due to psychosexual factors and severely
	impairs the chances of natural pregnancy.

- **5.** Situational sexual dysfunctions (e.g., periovulatory erectile dysfunction) should be managed through psychosexual support and, if necessary and available, medical treatment.
- **6.** Pro-erectile treatments can be considered to improve erectile function in patients suffering from ED: phosphodiesterase type 5-inhibitors are safe to use regarding reproductive outcomes, whereas limited evidence is available for prostaglandin E1.
- 7. Management of ejaculatory dysfunction requires a careful approach based on the degree of impairment to reproduction and on the type of dysfunction (premature/delayed/absent).
- 8. Sexual desire loss is common in infertile men and can be worsened by the physical and emotional consequences of MAR practices and techniques.
- **9.** While hypogonadism can be an important risk factor for the development of sexual dysfunction, administration of testosterone replacement therapy may not be advisable in couples seeking conception due to its potential to impair spermatogenesis.

B. Infertility

- I. Couple infertility
- 1. All couples should be offered the opportunity for separate infertility assessments.
 - 2. When expertise does not exist, appropriate referral for male or female infertility assessment is required.
 - **3.** Couples should be made aware that advanced maternal or paternal age increases the health risk of offspring.
- **4.** MAR should be the final step.

II. Female infertility

- 1. Over 250 million women have an unmet need to establish a family.
 - **2.** As the woman nurtures the pregnancy, pre-pregnancy health optimization is essential.
- 3. Medical conditions must be well controlled before pregnancy is contemplated.
- **4.** Pre-pregnancy weight is a major contributor to maternal and fetal morbidity and mortality; ideally, the body mass index (BMI) should be below 30 years at pregnancy start.
- **5.** Early investigations should be commenced where previous medical or surgical interventions affect fertility.
- **6.** Fertility therapies should only be commenced after a diagnosis is made and be etiological.
- 7. Where appropriate, all fertility therapies should be considered and offered before MAR is recommended.
- 8. When a spontaneous pregnancy is not possible, MAR should be offered.
- **9.** A multidisciplinary approach is needed in cases where the female has a significant medical, surgical or genetic risk.
- **10.** Practitioners should consider the child's interests in the investigation and treatment process.

- **11.** Fertility preservation can be offered to females who wish to postpone reproduction, following a discussion of realistic pregnancy likelihood and risk of pregnancy at advanced maternal age.
- **12.** Fertility preservation must be offered to all females diagnosed with cancer within reproductive age. Patients suffering from chronic diseases affecting fertility (e.g., endometriosis) should also be advised about this possibility.
- **13.** Fertility preservation should be offered to women who are at risk of losing reproductive potential while undergoing gonadotoxic therapy.

III. Male infertility

- **1.** Attempt to identify the cause of male infertility before starting treatment, as this may influence the choice of therapy.
- 2. A general and scrotal physical examination and a basic biochemical evaluation are recommended in all cases of male infertility. A scrotal ultrasound (US) should be considered.
- 3. Semen analyses must be performed according to contemporaneous World Health Organization (WHO) guidelines in a laboratory participating in an external quality program.
- **4.** Karyotype and Yq microdeletions analyses are recommended in men with sperm concentrations $\leq 5 \times 10^6$ /ml (two samples are required).
- **5.** Cystic fibrosis transmembrane conductance regulator (CFTR) gene evaluation is recommended in cases of suspected congenital genital tract obstruction.
- **6.** Sperm DNA fragmentation analyses could be applied in selected cases.
- **7.** Gonadotropin therapy is recommended in men with secondary hypogonadism seeking conception.
- **8.** Lifestyle modifications (cessation of cigarette smoking, reduce body weight in individuals with obesity, reduce alcohol consumption) are recommended in all cases of infertility.
- **9.** Varicocele treatment may be considered in men with infertility and palpable varicocele or young men with worsening semen analysis parameters, after consideration of the age of the female partner.
- **10.** Treatment with FSH can be suggested in selected men with idiopathic infertility and normal gonadotropins.
- **11.** Antioxidants, antiestrogens (tamoxifen, clomiphene) and aromatase inhibitors can be considered in selected men with idiopathic infertility as an off-label treatment, although the evidence of their use is low.
- **12.** Appropriate MAR technologies are recommended for male-factor infertility when other treatment options are not available, efficient or desired.

C. Contraception

I. General contraception

- **1.** Despite scientific and technological advances, the unintended pregnancy rate remains high (50% in the US), with 50% resulting in abortion.
- 2. More than 200 million couples have an unmet need for family planning.

- 3. The decision-making for a personalized (according to each partner's needs and preferences) contraceptive approach should be an informed, shared and couple-centered procedure.
- **4.** Sexually transmitted infections (STIs) must be considered as an integral part of risk reduction, contraception and education.
- **5.** Advancing male contraception methods remains a priority.

II. Female contraception

- **1.** Women should be able to decide when to have a child and be offered help if needed.
- 2. When a pregnancy is not desired, all women should be able to access contraception.
- **3.** Contraception education should be offered to all young, competent adults.
- 4. Multiple reversible (pills, patches, implantables, injections, and intrauterine devices) and usually irreversible (e.g. sterilization) are available, although local availability may differ according to geographical location

III. Male contraception

- **1.** Male contraception must be considered as an integral part of the physical, mental and social well-being of the man.
- 2. Male contraception accounts for only 20% of global contraceptive use, with a wide variation among countries; therefore, the male contribution to family planning must be enhanced.
- 3. Modern societies transform gender roles and establish gender equity in couple relationships. Both partners should share equal opportunities for family planning.
- **4.** Men have the right to choose whether and when to use contraceptives. Women have the right to be relieved from the burden of contraception that they carry almost exclusively.
- 5. Limited availability and lack of efficacy are two main obstacles to the widespread use of male contraception.
- **6.** Behavioral (coitus interruptus, fertility awareness) and physical (heat, other agents) methods are **not** recommended for family planning. Vaccines for male contraception remain experimental.
- **7.** Barrier (condoms) and surgical (vasectomy) methods are recommended for family planning.
- **8.** All stakeholders (couples, health professionals, researchers, policymakers, social groups, pharmaceutical industry) must be involved in the development of safe and effective male contraceptive methods.
- **9.** Efficient and safe hormonal and non-hormonal male contraceptive methods must be formally evaluated and introduced into clinical practice.
- **10.** The optimal contraceptive method must be safe, effective, practical, accessible, cheap, and reversible.