

The Fertility Problem at a Glance

Eddie Racoubian MD.MSC
Responsible St MARC Laboratory

Roughly 1/6 couples in the UK has problems conceiving a child. This estimate and others coming in from various countries all show a decline in human beings in their ability to “get pregnant”. Many other animal species are also showing similar trends. What is happening? And why suddenly now?

Traditionally, blaming fingers are pointed at women in infertility issues. This is because women are born with a finite number of eggs. Once these are used up, menopause sets in. However, recent data point to the male partners as being the problem in up to 50% of infertility cases. Recently, sperm counts have been shown to be in decline; in the West, there is a more than 50% decrease in these counts with an average decrease of 1.4% per year. This decline is up to 59% in N. America, New Zealand and Europe. Although it is not a fact yet, many scientists agree that the main causes are two: Chlamydia and pollution.

Chlamydia trachomatis is the most commonly reported STD (Sexually Transmitted Disease) in the US. It is easily cured, but can lead to difficulty in starting or maintaining a pregnancy if untreated. Infection in the female is usually asymptomatic and untreated patients can end up with pelvic inflammatory disease, chronic abdominal pain, and infertility. The CDC in the US recommends annual screening for Chlamydia in females <25 years of age & sexually active, and >25 years of age if at increased risk. In 2016, using only screening guidelines, there were around 1,600,000 positive cases in the US. Screening tests are either on a routine urine sample with a rapid card or an ELISA test that looks at current infection using the IgM status against *Chlamydia trachomatis*. These are relatively cheaper than the more advanced and specific PCR-based assays.

Pollution is a common problem and is affecting most of the planet today, even in the middle of the Pacific Ocean! Fertility related culprits are indicated for air pollution,

ingested plastics and pesticides mainly.

When it comes to smoking cigarettes (or “nargileh” or “sheeshah” or “hubbly-bubbly”- it’s all the same!!), it is known to reduce sperm counts by 20% at least versus non-smokers. Female smokers meanwhile damage their eggs leading to more miscarriages; increase their risk for cervical cancer, and can end up with pre-mature menopause. This is apart from the increased risk for lung cancer, the most common cancer in females and males.

Plastics are found everywhere: food packages, cosmetics, water bottles, pots and pans’ surfaces, etc. The chemical names which you may see are either “Phtalates” or “Bisphenol-A) or PFC. Phtalates (food packages) have been found in the urine of up to 95% of urban people. They are linked with impaired reproductive function and infertility in adults. Packages with phtalates have#3 in the middle of the recycle symbol & a PVC letters underneath. Bisphenol-A (BPA in water bottles) have been shown to reduce neurological development in children and result in poor semen quality in adults.

Pesticides & weed killers are used in agriculture to improve crop output and quality. Unfortunately, even at nominal doses, some are not yet fully proven to be safe to human health. For example, Glyphosate (Roundup ®) is used on 97% of US wheat: it dries the seeds quickly to make it market-ready as flour. It is linked to infertility by the WHO, although its maker Monsanto denies any harm in its use. Glyphosate is also linked to autism, food intolerance and cancer. Pesticides on the other hand are dangerous chemicals. Other than killing the much needed bee population, they can also seep into the water table from which much of Lebanon’s water comes.

The problem is vast, and there is little one can do to avoid such issues as pollution or plastics. The very little we can do is to avoid smoking and smoker’s smoke, use glass water bottle for children as much as we can, and eat Mediterranean food with fresh organic leaves, good olive oil and finally, avoid processed foods.





TOGETHER TO EXCELLENCE

Your Trusted Certification Partner



HEALTH CARE Certification

Advancing Quality Improvement through:



Accreditation
in Healthcare
Facilities



PATIENT SAFETY
& Required
Organizational
Practices



Quality Improvement
through Performance
Indicators



Risk Management
& Safety in Health
Services





Beirut, Lebanon

+961-1-455512/3/4

www.umbqmi.com
info@qmiaw.com

Our Services: ISO Certification - CE Mark - Training - Suppliers Audit