



EXPERT GUIDE: OBSTETRICS & GYNAECOLOGY 2016  
Czech Republic



**Kateřina Veselá**  
www.en.repromeda.cz  
+420 533 306 351



## Detecting Chromosomal Anomalies in Early Embryos through Preimplantation Genetic Screening (PGS)

By Kateřina Veselá

Reproduction genetics is continuously becoming one of the most important focus areas of assisted reproduction centres. Although it may not seem obvious, infertility, particularly infertility caused by advanced maternal age, is very closely linked to genetic factors. Numerical chromosomal anomalies, so called aneuploidies, arising in female oocytes, are one of the most serious causes of infertility. Many studies have confirmed that the number of aneuploidies occurring in oocytes increases significantly with advancing female age. These aneuploidies can be detected in early embryos through preimplantation genetic screening (PGS). In addition to this, PGS methods are

spring. Incorrect chromosomal numbers in embryos are one of the most significant causes of embryo implantation failures and of unsuccessful IVF cycles in general. Most types of aneuploidies are not compatible with life, although in specific cases, chromosomal abnormalities, may lead to live births of affected foetus. The most common and well known conditions caused by chromosome aneuploidies include Down syndrome (extra chromosome 21), Patau syndrome (extra chromosome 13), or Edward syndrome (extra chromosome 18). However, the majority of these pregnancies end with foetal abortions (either spontaneous or induced).

PGS aims at improving pregnancy and live birth rates by embryo screening for chromosomal abnormalities. Screening is conducted in the shortest time and by the safest therapeutic means possible. Other advantages of PGS include:

- Reduction rate in miscarriages
- Decrease in the rate of pregnancy complications

the course of the transfer perspective chromosomal set, i.e. us. These embry-potential, a lower



- Multiple pregnancies reduction, due to one-embryo-only transfer policies
- Providing crucial diagnostic information, allowing the patient to decide whether to undergo another IVF cycle or consider gamete donation.

Without PGS, embryos for uterus transfer are selected solely on their visual quality, morphology, and growth dynamics. Regrettably, these criteria are not sufficient to exclude embryos

Due to preimplantation screening, we can inspect genetic qualities of selected embryos and

MEDICAL LiveWire  
OBSTETRICS & GYNAECOLOGY 2016  
EXPERT GUIDE



EXPERT GUIDE: OBSTETRICS & GYNAECOLOGY 2016

**Dr. Natasha Abdul Aziz**  
www.muhammadology.com  
natasha@muhammadology.com



## Addressing the Issue of Communication & Language Barriers for Non-English Speaking Pregnant Women in the UK

By Dr. Natasha Abdul Aziz

Communication forms the backbone of the relationship between healthcare professionals and their patients. With an increasingly mobile global patient cohort – 25% of all pregnancies here occur in mothers born outside of the UK – healthcare providers need to consider not just which words to choose to identify, diagnose, and treat a woman, but also what language would best convey the situation as a whole, and offer support. Williams (2010) considered us that the difference between a good and great physician was that the latter treated patients, the former – just disease.

Whilst most hospitals have access to translators in person or over the telephone, the process can be cumbersome and invasive on patient privacy. Ad-hoc translators on the other hand are not trained in medical terminology and may have a relationship with the patient that renders their involvement inappropriate. Knowing whether your patient's concerns have been addressed and the information taken on board can be difficult to gauge without fluency in their native language. As George Bernard Shaw remarked, "The single biggest problem with communication is the illusion that it has taken place."

The National Institute for Clinical Excellence found that 2/3 of pregnancy related morbidity and mortality was because "poor support"

That this illusion perpetuates can be seen in the stark statistics representing the past 10 years of maternity care, identifying women who are not native speakers of their host country's language to have a threefold higher morbidity and mortality rate.

In 2011 The Centre for Maternal And Child Enquiries report listed professional interpretation services as a top 10 recommendation stating: "Professional interpretation services should be provided for all pregnant women who do not speak English. These women require access to independent interpretation services because they continue to be ill served by the use of close family members or members of their own local community as interpreters. The presence of relatives, or others with whom they interact socially, inhibits the free flow of passage of crucial but sensitive information, particularly about their past medical or reproductive health history, intimate concerns and domestic abuse."

The National Institute for Clinical Excellence found that 2/3 of pregnancy related morbidity and mortality was because "poor support"



The latest *Mothers and Babies: Reducing Risk through Audit and Confidential Enquiry 2012* report found maternal mortality higher amongst migrant women, making up greater than 1/3 of all maternal deaths.

A review of the health of migrants in the UK conducted by the University of Oxford migration observation in 2014 found "Barriers to grants unfamiliar with health care systems in the UK, insufficient support in interpreting and translating for people with limited English fluency... and cultural insensitivity of some lower line health care providers (Phillimore et al 2010, Johnson 2005). [These] cut across length of residence, affecting longer established migrants as well."

Medical LiveWire Expert Guides are available on all platforms. Access everything from our latest publication to our archived collection through your computer, laptop, tablet or smart phone. It's as easy as one click of the button or a tap of the screen.