European health

Europe, depending on how it is defined, consists of about 40 countries that share a geographical proximity. Most are considered to be developed but, with the current immigration trends, many will find more citizens arriving who are socio-economically disadvantaged.

The latest Euro Health Consumer Index report has been produced from Brussels (Hjertqvist Health Cons Powerhouse Ltd ISBN 978-91-980687-5-7.1915) and data are presented on the healthcare of Europe’s 500 million residents by country. Each country’s index is measured on (1) patient’s rights and information disclosure (2) accessibility and waiting times (3) services offered (4) prevention (5) access to pharmaceuticals.

Rankings were from highest scoring to lowest scoring.

Country rankings

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Despite the Eurozone’s economic woes, austerity measures and the obesity epidemic, the general standard of healthcare is improving as the same criteria are used for each Consumer Index report and the ratings are rising year on year. Broad comments are that there is only a “vague correlation between financial resources and high-quality care” with the suggestion that other factors such as openness, responsibility, a climate of trust and accountability, corruption and patient empowerment should all be taken into account when measuring patient satisfaction.

Caesarean section rates (within a few percent) are:-

About 50% Cyprus, Greece

About 35% Italy, Romania, Portugal, Malta, Hungary, Switzerland

About 30% Germany, Albania, Poland, Austria

About 25% UK Scotland, Luxembourg, Serbia, Ireland, Spain, Slovakia, UK England

About 20% Montenegro, Czech Republic, Lithuania, Latvia, FYR Macedonia, France, Denmark, Estonia, Croatia, Belgium, Slovenia

About 15% Bosnia & Herzegovina, Norway, Sweden, Iceland, Netherlands, Finland
It is fascinating that the CS rates are almost the opposite of the general healthcare rankings. One could conclude that higher CS rates do not reflect a higher standard of overall healthcare. Certainly the lowest CS rates are found in some of the most advanced countries socio-economically and health-wise.

**Menopausal “timing hypothesis”**

Concerns about interpreting the effects of hormonal therapy (HT) on cardiovascular health appear to depend on when HT is initiated in relation to the menopause transition. The original observational studies showed clear benefits whereas randomised trials showed different results. The observational studies looked at the cardiovascular effects of women using HT for symptoms whereas the largest randomised trial (the Women’s Health Initiative – WHI) looked at prevention and the participants were not recently “transitional” but at least a decade postmenopausal.

The timing hypothesis suggests that if the estrogen receptors in the cardiovascular system (CVS) are not stimulated by high levels of endogenous estrogens for a number of years, they become refractory and cannot regain their function to protect against atherosclerosis. On the other hand, if estrogens are started close to the menopause transition, their positive effect could be maintained.

To investigate this hypothesis scientists took 2 groups of healthy women and gave them oral estrogen plus vaginal progesterone or placebo. The difference between the groups was that one group was recently menopausal while the other group was at least 10 years postmenopausal. Both groups were studied in terms of an accepted marker of CVS health, namely carotid-artery intima-media thickness. After 5 years of the trial, those who were started on HT within 5 years of their menopause transition had less progression of their artery wall thickness than those who were started long after their menopause (Hodis et al NEJM 2016;374:1221-31).

This suggests that estrogen receptors are less able to respond to estrogens if there is a long delay between a woman’s menopause and when HT is started. It does not prove conclusively that estrogens initiated near the menopause transition prevent CVS events but it does give a bio-physical explanation of a mechanism of action that may clarify clinical results.

**Acupuncture for hot flushes**

More women who have hot flushes use complementary or alternate interventions than approved medications. Estrogens are the most effective treatment for menopausal symptoms and certainly in the short term (up to 10 years) have overall beneficial effects but women are reluctant to use them because of bad publicity mainly generated by the Women’s Health Initiative (WHI) trial over a decade ago.

Acupuncture is frequently tried for symptomatic relief but no trials have shown its clinical effectiveness. The latest study comes from Australia where more than 150 women experiencing at least 7 flushes per day were given 8 weeks of acupuncture and compared with a similar group who were given sham acupuncture (Ee et al Ann Int Med 2016;164:146-54). The real acupuncture was carried out by Chinese medicine practitioners who inserted thin needles into specific body points while the sham procedure gave the sensation of a prick but did not involve needles and the women themselves were not aware whether they were receiving sham or real acupuncture.

Hot flush scores were recorded at baseline, halfway through treatment, at the end, then 4 and 6 months later. There were no differences between the two groups at the end of treatment and no
serious side-effects reported. Overall there was a 40% improvement in both groups which is probable due to chronological changes, the Hawthorne effect or the placebo effect.

The target group consisted of white women who had moderate to severe symptoms of hot flushes which were not improved by acupuncture. The changes noted would have certainly been bettered (improved) by estrogen therapy which would have had other beneficial effects as well. It is a pity that expensive and time-consuming interventions continue to be pursued when proven medical treatments are available. The WHI study has much to answer for in terms of emotional and practical damage.

**Significance of atypical glandular cells on cytology**

Cytological screening has dramatically lowered cervical cancer rates whenever it has been introduced. Low and high grade squamous intra-epithelia lesions (LSIL & HSIL) in-situ lesions and invasive cancers are identified, followed-up and treated with excellent long-term results.

Also present in the ectocervix, and frequently appearing on cytological smears, are adenomatous cells and these can be reported as normal, atypical glandular cells (AGC) or adenocarcinoma. Although AGC reports are far less common than atypical squamous cells or atypical squamous cells of uncertain significance (ASCUS), they do have an important prognostic value and a team from Sweden has followed up AGC findings for 15 years (Wang et al BMJ 2016;352:i276). The researchers found that AGC presence had a prevalence risk of 1.4% of cervical cancer – somewhere between LSIL & HSIL rates. Most of the risk was for the development of adenocarcinomas. If AGC were present on initial cytology then the woman’s risk of cervical cancer remained elevated well into the next decade.

Historically those with AGC have not been as rigorously followed up as those with ASCUS, LSIL or HSIL results and the authors say that “management of AGC seems to have been suboptimal in preventing cervical cancer”. They suggest that more aggressive assessment and follow-up strategies are warranted.

**Zika virus**

Although of little interest to those primarily involved with women’s health beyond the menopause transition, SAMS members would probably like to be up-to-speed with the epidemic sweeping through the Americas.

Zika virus (ZIKV) continues to cause concern as a dangerous infection in pregnant women and a cause of Guillain-Barré syndrome in adults (Cao-Lormeau et al Lancet 2016;387;1531-9). There is evidence that it is teratogenic in at least 10% of infected women (unlike rubella at 90%) and that spread has not been confined to South and Latin America (Petersen et al NEJM 2016;374:1552-63).

There are a number of ways to gather evidence of cause and effect of potential congenital infective agents. These are:

1. **Circumstantial** – There are temporal and geographical factors linking ZIKV with microcephaly in Brazil. In early 2015 ZIKV infections were noted, and by the end of the year over 1 million cases had been documented. Concomitant with this rapid spread, cases of microcephaly appeared in far greater numbers than before. Although the background prevalence was not accurately known, the 4 000 infants affected drew immediate concerns about possible teratogenicity as the estimated prevalence rates had risen 20 fold.
2. **Epidemiological** – By looking at cohorts of affected infants in whom virological tests are positive for ZIKV and those unaffected then comparing incidences of abnormalities, it is possible to establish probability coefficients. This will take time as virology on amniotic fluid, cord blood and maternal serum is complex laboratory work, requiring polymerase chain reaction testing and virus typing. It also requires the exclusion of other causes of microcephaly such as toxoplasmosis, rubella, herpes, syphilis and cytomegaloviruses plus establishing whether ZIKV exposure makes fetuses more susceptible to other infections or toxic factors in the environment. These studies are in progress and data should be available in 6 months.

3. **Case studies** – Affected infants born with neurological abnormalities are studied and their deformities measured for patterns of uniformity. Images of their brains are captured using ultrasound, computerised tomography (CT) and magnetic resonance imaging (MRI) to identify typical patterns. At the same time ZIKV is recovered from the cerebrospinal fluid of the children and the presence of IgM antibodies is established. Such studies have been published (Aragoa et al *BMJ* 2016;353:i1901, Baptista et al *BMJ* 2016;353:i2194 & Hazin et al *NEJM* 2016.doi.10.1056/NEJMc1603617) and all found clinical and anatomical evidence compatible with congenital ZIKV infections.

This pathological evidence was sufficient, together with Brazilian epidemiological data, for the United States Centers for Disease Control (CDC) and announced on 13 April 2016 that ZIKV causes microcephaly and a range of birth defects (Rasmussen et al *NEJM* 2016 doi.10.1056/NEJMsr1604338 and Dyer *BMJ* 2016;353:i2167).

Whether WHO defers to the CDC’s conclusion, or waits for its own study results is moot but knowledge of the threat must be understood by all medical personnel worldwide.

Athol Kent

*Menopause Matters is a monthly review of matters menopausal that have recently appeared in the journals. It is produced for the South African Menopause Society and the summaries concentrate on clinical issues although some underlying patho-physiology will be included to ensure a scientific basis for the work. These summaries and opinions do not necessarily reflect the views of the S A Menopause Society.*

*The idea is derived from the Journal Article Summary Service (JASS) which summarises general O&G articles. Information about this service can be obtained from Athol Kent (atholkent@mweb.co.za) or from the JASS website www.getjass.com*