DEBATE-CONTINUED

Monitoring reproductive health in Europe: what are the best indicators of reproductive health? A need for evidence-based quality indicators of reproductive health care

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Monitoring reproductive health by the Reprostat indicators in Europe will facilitate the transparency of reproductive health as well as comparisons over time and between countries. However, for the monitoring and improvement of reproductive health care, we suggest the systematic development of evidence-based quality indicators, especially process and structure indicators.

Key words: guidelines/indicator/monitoring/quality of care/subfertility

Reprostat
In accordance with Jahn et al. (2006), we agree that monitoring reproductive health in Europe by indicators facilitates the transparency of reproductive health as well as comparisons over time and between countries. Moreover, insight into actual reproductive health may give rise to initiatives to improve reproductive health. Therefore, we underline the importance of the development of an indicator set for reproductive health by ‘Reprostat’ (http://ec.europa.eu/health/ph_projects/2001/monitoring/fp_monitoring_2001_al_frep_02_en.pdf). However, the question is: what kind of indicators do we need in reproductive health? The Reprostat set contains mainly indicators for reproductive health and not for reproductive health care that we deliver in our clinics. Only a few of these indicators can be used as proxy measures for reproductive health care, such as Reprostat indicator 11: ‘the proportion of deliveries associated with assisted reproductive technology (ART)’.

Monitoring reproductive health care
In our opinion, monitoring reproductive health care by quality indicators is also important, because it gives insight into the overall quality of delivered subfertility care, it gives the opportunity to compare the delivered care with the recommended care in evidence-based guidelines and determination of substandard reproductive health care can easily guide improvement of this care. Therefore, to improve reproductive health care, a comprehensive set of clinical practice guidelines, valid quality indicators and effective strategies to implement the guidelines are needed.

Clinical practice guidelines provide clinicians easily accessible information regarding optimal reproductive health care. They are a tool to bridge the gap between evidence from the literature and the daily practice. However, clearly, the availability of evidence-based clinical guidelines by itself does not result in the delivery of optimal patient care (Grimshaw and Russell, 1993; Bero et al., 1998). Implementation of the key recommendations of these guidelines requires more than just their publication and dissemination. Well-developed and evaluated strategies are necessary to facilitate this implementation. Quality indicators, defined as ‘measurable elements of practice performance for which there is evidence or consensus that they can be used to assess the quality of care’ (Donabedian, 1988), are crucial in this field; they measure the application of guidelines in daily practice and provide ammunition for feedback and development of implementation strategies (Figure 1).

Different types of indicators
Quality indicators can refer to processes and structures of medical care as well as to the outcome of delivered care (Campbell et al., 2000). In the case of reproductive health care, ‘the proportion of professionals monitoring ovarian stimulation by ultrasound’ and ‘the proportion of professionals...
informing subfertile women about their reduced fertility by smoking’ are process indicators, ‘the proportion of hospitals with a laboratory accreditation’ is a structure indicator and ‘the live birth rate per cycle’ and ‘the proportion of women having been screened for Chlamydia trachomatis before uterine instrumentation’ are outcome indicators.

Reproductive health care has so far mainly been monitored by outcome indicators prompting a recent debate in this journal (Min et al., 2004). However, a disadvantage of using outcome indicators as a measurement of health care performance is the probability factor in health care. That means just the same medical treatment does not always have the same outcome and the other way around: an acceptable outcome does not have to be caused by a desirable treatment. Differences in outcome may also be due to case mix and the way of data collection (Eddy, 1998; Mant, 2001). In addition, one of the potential risks to report quality of medical care in terms of outcome measurements only is the refusal to treat patients with a poor prognosis. The solution for these problems is to rely more on process and structure than on outcome indicators.

Process indicators tend to be more sensitive and rarely confounded by other factors, if properly designed (Eddy, 1998; Mant, 2001). Moreover, process indicators can steer plans towards directed improvement activities (Rubin et al., 2001b). Of particular value are process or structure indicators that have been demonstrated to have a link with reproductive health-care outcome. The better this association, the stronger the benefits of applying the quality indicators are in terms of, for example, improved ongoing pregnancy rates and reduced multiple pregnancy rates.

Process and structure indicators should be based ideally on evidence-based guidelines, literature and experts’ opinions. Moreover, such a set of indicators should be developed systematically and carefully, accepted by the target group and be sensitive to changes in the quality of care (Rubin et al., 2001a; Campbell et al., 2003).

A need for process and structure indicators

However, despite growing recognition of the importance of increased transparency and more rigorous monitoring of health-care performance to decrease the delivery of inappropriate medical care, there have been only a few process or structure indicators suggested for reproductive health care. For example, the clinical guideline about fertility assessment and treatment for people with fertility problems developed by the National Institute for Clinical Excellence contains five measures that could be used (National Institute for Clinical Excellence, 2004). Recently, we developed process and structure indicators for all national guidelines about subfertility of the Dutch Society for Obstetrics and Gynaecologists in two Dutch multicentred studies: (i) the Quality study on Intrauterine insemination in the Netherlands among Gynaecologists (KING study; see for preliminary data: http://www.isqua.org.au/isquaPages/Conferences/amsterdam/AmsterdamWebFiles/webfiles/CONF20-10-04/Posters/Abstractsam/A13a/A13a-249-Haagen-doc.pdf?search=%22process%20indicator%20subfertility%20care%22) and (ii) the study about subfertility guidelines: Patient-Related Implementation in the Netherlands among Gynaecologists (SPRING study; see http://clinicaltrials.gov/show/NCT00119925). We will report these sets in the near future.

Role of ESHRE?

Last year, some new clinical guidelines were published by the European Society of Human Reproduction and Embryology (ESHRE) about, e.g. endometriosis, preimplantation genetic diagnosis and recurrent miscarriage (Kennedy et al., 2005; Thornhill et al., 2005; Jauniaux et al., 2006). Although these evidence-based guidelines were well developed, unfortunately they were not accompanied by a set of quality indicators.

Recently, after an exploration of all national guidelines about intrauterine insemination in Europe, we suggested the establishment of a central body for reproductive medicine in Europe with expertise in up-to-date guideline development methodology to improve the scientific validity and the international consensus and to reduce the inefficient use of resources (Haagen et al., 2006). We would argue for incorporating this central guideline development with a central indicator development to facilitate the evaluation of reproductive health care over time and between countries. The issue of whether or not ESHRE, e.g. under the auspices of the special interest group in Quality and Safety in ART, will act here as a central body should be discussed.

In conclusion, we welcome the Reprostat indicators for monitoring reproductive health in Europe and see it indeed as an important part of a quality control system. However, for the monitoring and improvement of reproductive health care, we suggest the central and systematic development of process and structure indicators that are based on evidence-based clinical guidelines.

References


