

Survey about Antenatal and Postnatal Care System and Content (APCSC) in European countries

Proposal and first draft

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Blondel B. Some characteristics of antenatal care in 13 European countries.

BJOG 1985 (data from 1981)

- 12 countries (Belgium, Denmark, Finland, France, Germany, Luxembourg, Netherlands, Norway, Sweden, Switzerland, UK: England and Wales, UK: Scotland)
- Topics covered:
 - Number of antenatal visits
 - Role of obstetricians, midwives and general practitioners
 - Home visiting system
- Results: The countries differ in the number of prenatal visits, the role performed by midwives and the use of home care. It shows that there is no single model of antenatal care among countries having similar fetal and infant mortality.

Hemminki E, Blondel B. Antenatal care in Europe: varying ways of providing high-coverage services.

Eur J Obstet Gynecol Reprod Biol 2001

- 13 countries (Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Sweden, UK)
- Topics:
 - Main care provider (midwife, general practitioner, gynecologist/obstetrician, shared care)
 - Integration with other services (separate service, service specialized in women's health, general service)
 - Main site of care (outside hospital, in and outside hospital)
 - Financing (taxes only, public insurance only, partly out-of-pocket)
- Results: Thirteen systems for providing antenatal care were found. No clear grouping by organizational characteristics emerged. Organizational characteristics and the utilization of antenatal services or perinatal mortality did not relate to each other.

Bernloehr A, Smith P, Vydelingum V. National guidelines on antenatal care: A survey and comparison of the 25 member states of the European Union.

Eur J Obstet Gynecol Reprod Biol 2001

- 25 EU member states participating
 - A structured questionnaire was sent to the Ministries of Health and the societies of obstetricians and midwives.
 - Descriptive analyses identified which and how many member states recommend a test and whether there was a correlation between the gross national product and the number of tests recommended.
 - No information published about the number of tests, timing, and population tested (all vs high risk)
 - Recommendation \neq Routine
- Table 7** Correlation between average GNP and intensity of care
- | Group of countries | Recommendation | |
|--------------------|----------------|--------------------|
| | Types of tests | Total no. of tests |
| GNP above average | 21.3 | 64.1 |
| GNP below average | 26.8 | 113.8 |
- Content analysed – are there specific tests performed during pregnancy?
 - **Physical tests** (Blood pressure, Breast examination, Fetal movement count, Foetal position, Formal risk scoring, Full physical examination, Fundal height, Body mass index, Maternal weight, Vaginal examination)
 - **Technical tests** (Auscultation (foetal heart), Cardio-tocography, Doppler ultrasound, Ultrasound, abdominal, Ultrasound, transvaginal)
 - **Laboratory tests** (Alpha-feto-protein/triple, Atypical red cell antibodies, Blood group, Rhesus factor, Chlamydia trachomatis, Fetal fibronectin, Gestational diabetes OGTT, Gonorrhoea, Haemoglobin, Haemoglobinopathies, Hepatitis B virus, Hepatitis C virus, HIV, Lues, Papanicolaou smear, Placental hormones, Rubella titer, Streptococcus group B, Toxoplasmosis, Urinalysis/bacteria, Urinalysis/glucose, Urinalysis/protein)

Topcu G, Savona-Ventura C, Ayres-de-Campos D et al. Provision of antenatal care in Europe - A scientific study commissioned by European Board and College of Obstetrics and Gynaecology (EBCOG) Eur J Obstet Gynecol Reprod Biol 2019

- 23 countries participating
- Topics covered:
 - Antenatal care service provision
 - Preventive strategies
- Results superficial, no possibility to compare care in details
- Showing capabilities of the system, and not the routine care, e.g.
 - Nine countries, including Turkey, UK, Ukraine, Slovenia, Slovakia, Spain, Serbia, **Poland**, and Greece, reported offering more than 3 scans during the antenatal period with the latter two **offering >7 scans**
 - **Non-invasive prenatal testing (NIPT)** is offered **on patient request for low-risk cases** by most of the countries (84.6%) notably Austria, U.K., Cyprus, Italy, Slovenia, Denmark, Estonia, Latvia, Portugal, Turkey, Ukraine, France, Romania, Slovenia, Kyrgyzstan, Germany, Czech Republic, Serbia, **Poland**, Ireland, Malta, and Greece.

Table 3
Main provision of antenatal care in low- and high-risk pregnancies.

Antenatal care	Low risk pregnancies		High risk pregnancies	
	Number of countries	%	Number of countries	%
Midwifery-led	8	30.8	2	7.7
Mixed midwifery-doctor	10	38.4	7	26.9
Medical practitioner-led				

Table 5
Provision of antenatal support services.

Antenatal support service	Number of countries	%
Life-style advice	25	96.2
Parentcraft classes	18	69.2

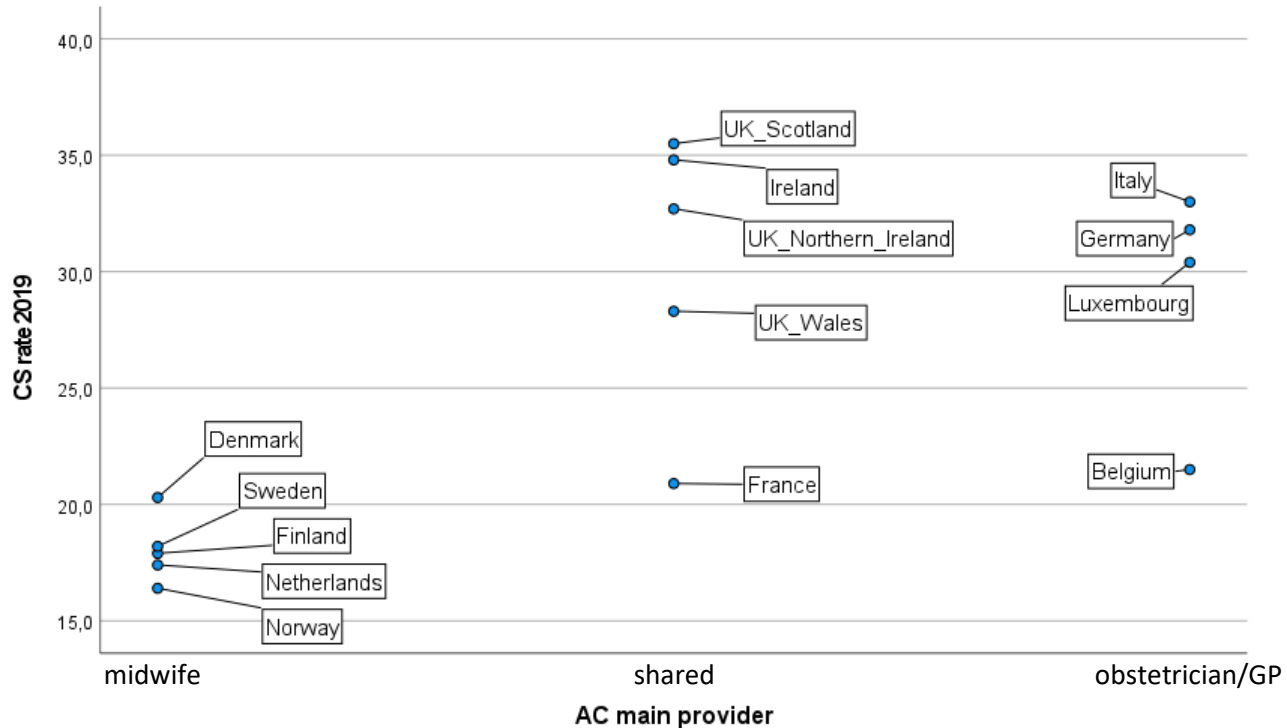
Preventive strategies protocol availability	Number of countries	%
• Premature birth	23	88.5
• Pre-eclampsia	24	92.3
• Mental health disorders	18	69.2

Lazzerini M, Armocida B, Pessa Valente E et al. Antenatal screening practices in the WHO European Region: a mixed methods study.
Journal of Global Health 2020

- Comparison of published and unpublished guidelines, policies or cross-sectional studies on ANC screening practices from 15 European countries, which were searched for in four electronic databases (MEDLINE, Global Health Library, Web of Science, Google) or sent by Key Informants
- Accordance to recommendations (by WHO or NICE mainly) studied
- Results given as closed-ended answers with 3 options (in line with recommendations, not in line, not covered).
- Are all recommendations issued by WHO are proper for European region?
- No possibility to learn in what details national recommendations differ from reference recommendations and to compare them to each other

[illegible]

CS rates in 2019 by antenatal care main provider (according to data from Hemminki 2001 and Blondel 1985)



Iron supplementation in pregnancy in context of screening for anemia

Country	Recommendations
Denmark	40-50 mg from 10 week
Finland	50 mg in case of anemia after 12 week (HGB<11 mg/dl w I trimester or <10 mg/dl in II and III trimester)
France	In case of anemia (diagnosis based on blood count)
Germany	Diet rich in iron, decision after the diagnosis of insufficient intake
Iceland	Diet rich in iron, decision about supplementation based on blood analysis
Ireland	16-20 mg and diet rich in iron. In case of poor tolerance, 120 mg every other day or once a week. Do not supplement when Hb > 13 mg/dl
Italy	60-120 mg in case of anemia (HGB<11mg/dl in I and III trimester and HGB<10,5mg/dl in II trimester)
Lithuania	Diet rich in iron
Netherlands	After assessing the iron level in the blood
Poland	Before 16 week, when HGB<11mg/dl and low ferritin level; may be considered after 16 week, when ferritin <60 µg/l, at a dose ≤ 30 mg/day
Portugal	Minimum 60 mg in non-anemic women with ferritin <30 µg/l
UK	Diet rich in iron, individual decision on supplementation; supplementation in women at increased risk of anemia if early pregnancy ferritin <30 µg/l

Goal of the survey

- The goal of the survey is to collect information about organization of outpatient antenatal and postpartum care in European countries in terms of national (or official) recommendations.
- We want to compare the system and content of routine baseline care for normal pregnancies: all pregnancies of a healthy woman with an uncomplicated singleton pregnancy.
- Only antenatal care up to the estimated date of delivery and postpartum care after leaving the place where the delivery took place will be considered.

Topics to ask - first draft (1)

SYSTEM OF OUTPATIENT ANTENATAL AND POSTPARTUM CARE

- Basic model within the national health system / Alternative system of care for women who don't want to use the basic model
- Primary antenatal care provider (for uncomplicated pregnancies) responsible for clinical decisions
- Financing
- % of population using the system

STRUCTURE OF ANTENATAL CARE (according to national recommendations for low-risk pregnancy till the estimated date of delivery)

- Recommended number and timing of antenatal visits
- Recommended number and timing of ultrasound examinations in uncomplicated pregnancies

Topics to ask - first draft (2)

CONTENT OF ANTENATAL CARE

Screening for:

1. weight gain (+ additional care or service + special recommendations regarding lifestyle and prevention of complications)
2. gestational diabetes (serum glucose, OGTT, urinalysis – glucose; details, timing, population screened)
3. preeclampsia (BP measurement, urinalysis – protein, umbilical arteries flow, biomarkers; details, timing, population screened) + low dose aspirin administration (dose, timing, population)
4. infectious diseases (syphilis, hepatitis B, toxoplasmosis, HIV, Group B streptococcus (timing, population)
5. depression and/or anxiety during pregnancy and postpartum care (tools used, population, timing)

EDUCATION DURING PREGNANCY

1. parental classes (population, type of activities, timing, financing)
2. availability of official national education materials (printed, on-line, mobile applications)

Topics to ask - first draft (3)

VITAMIN AND MICROELEMENT DEFICIENCY

1. anemia (HGB, ferritin, iron; timing, population) + iron supplementation (dose, timing, population, diet details)
2. folic acid (dose, timing, population, diet details)
3. vitamin D (dose, timing, population, diet details)
4. iodine (dose, timing, population, diet details)
5. DHA/omega 3 fatty acids (dose, timing, population, diet details)
6. calcium (dose, timing, population, diet details)

POSTPARTUM CARE

1. postpartum visits (number, timing, care provider (after uncomplicated birth))
2. home postpartum visits (number, timing, visit provider, population entitled)

Potential use of data

- Analyses on relation of content of care to specific perinatal indicators (Is more better?)
- Knowledge and understanding the differences in care between countries
- Comparison of specific aspects of care
- Base for national discussion and improvment of the elements of care