

Instructions how to use the ESC teach the teachers course and self-learning tool

Welcome to the ESC advanced learning tool

To improve and facilitate knowledge and use of contraception, abortion, sexually transmitted infections and reproductive health care across Europe is the major aim of ESC. By developing this teaching tool ESC aimed to facilitate access to advanced knowledge and provide teaching material for courses especially in countries with insufficient training options.

This ESC-teaching tool and self-learning course fills a gap. It adds specialised and updated knowledge to the WHO teaching course (www.fptraining.org). The tool has been prepared by five authors experienced in contraception and evidence based medicine.

The concept of this advanced training tool was to create slide sessions with notes, which can be used for teaching, but also for self-study. The training tool does not provide new guidelines but intends to enable the doctor to understand the background of WHO MEC, to identify women at increased risk for complications and to understand options to reduce adverse events and complications. This should facilitate and improve contraceptive counselling in daily but also difficult situations.

Content of the slides is based on new evidence and references are given for more interested doctors. The tool also includes five sessions about contraception in women with medical

conditions. As this is an advanced learning tool we recommend less experienced nurses and doctors to first study the WHO training tools (www.fptraining.org),

This self-study concept allows all ESC members to use the tool for self-training and update their knowledge around contraceptive methods

Having studied this tool or visited a course based on this tool should

- Enable you to take a complete history of factors important for contraceptive counselling
- Improve your understanding of risks and benefits associated with use of CHC and different types of CHC
- Enable you to identify women with cardiovascular and other risk factors for serious adverse events
- Enable you to a balanced counselling in patients with cardiovascular risk factors based on exact numbers of potential events
- Improve your counselling skill with regard to differentiate between different types of POC and understand the differences in bleeding patterns and side effects, also in comparison with CHC
- Improve your counselling skill with regard to differentiate between different types of IUD
- Improve your counselling skill with regard to harmless and harmful side effects for all women and adolescents who want to use an IUD
- Improve your counselling skill for patients with difficult medical conditions and / or use of enzyme inducing drugs
- Improve your counselling skill for permanent methods (male and female options)

A successful use of this tool is only possible, if the teacher or user has studied and is familiar with the WHO training tool. The broad information given in the slide notes allows better understanding of the background of the key messages. Lots of references are provided for those who want to go deeper into a topic. The Kahoot test, also based on advanced knowledge, will give you an overview if you picked up the key messages of the course.

Practical considerations for courses

- Teaching of all topics included will need around two days.
- We would recommend to give a short introduction to the WHO/MEC in the beginning and ask participants to study the WHO training tool (www.fptraining.org) in advance.
- Plan after each session 10 minutes for questions, and discussions.
- According to your needs and the available time for a course you could also select some topics of the tool for a half-day or one day course.
- Teaching the 4 CHC sessions, 5 MC sessions, the IUD sessions and POP sessions will need half a day each. For permanent methods 40 minutes should be reserved.
- Our experience shows that the practical work on cases is very helpful. Spending twenty to thirty minutes for one case is recommended.

The authors of this ESC tool will help you with organising and planning courses, whenever possible. Planning enough in advance will increase the probability for us to participate as a speaker. ESC members can apply for financial support for courses: <http://www.escrh.eu/education/grants>.

Gabriele Merki
ESC President

Overview Sessions and Cases

Topic	Abbreviation in slides
Combined hormonal contraceptives	CHC I
Combined hormonal contraceptives	CHC II
Combined hormonal contraceptives	CHC III
Combined vaginal ring, combined transdermal patch	CHC IV: CVR,CTP
Case Workshops Case 1: CHC history risks Case 2 : CHC history	WS 1
Medical condition: Mental disabilities Eating disorders	MC Mental disorders
Progestin only contraceptives overview	POC Overview
Progestin only pill with desogestrel and Depot medroxyprogesterone acetate (DMPA)	POP and DMPA
Etonogestrel-releasing implant	POC Implant
Medical condition: Obesity and family history for VTE	MC Obesity, family history and VTE
Workshop 2 Case 1 : breastfeeding and obesity Case 2 : POC and bleeding	WS 2
Medical condition: 1.Contraception in women with HIV infection 2.Hormonal contraceptives and drug interactions	MC Women with HIV CHC and Drug interactions
Intrauterine devices overview	IUD Overview
Copper-IUDs	Copper-IUDs
Levonorgestrel releasing intrauterine system	LNG-IUS
IUDs in special situations	IUDs in special situations
Medical condition: Migraine and depression	MC Migraine and depression
Female and male sterilisation	Female and male sterilisation
Workshop 3 Case 1: Permanent methods Case 2 : LNG-IUS – abortion-dysmenorrhoea	WS 3
Medical Condition: Hormonal contraception and Breast and ovarian Cancer BRCA1/BRCA2 carriers	MC CHC breast and ovarian cancer
Workshop 4 Case 1: Non-oral CHCs (15 min) Case 2: POC-Breastfeeding-EC (15 min) Case 3: STD and IUD (30 min)	WS 4
Kahoot quiz / discussion of responses	Separate file
Open discussion / evaluation	

1. Content of each session

CHC I

- Clinical relevant metabolic effects of ethinylestradiol (EE)
- The variations in individual steroid plasma levels and potential clinical consequences
- The difference between the mostly used progestins in CHCs
- Typical properties of progestins
- Types and dosages of CHCs
- Clinical effects of a lower EE dosage
- Difference between pills with estradiol /estradiolvalerate and EE

CHC II

- How to take a history before contraceptive counseling
- Special risk screening for use of CHCs (higher risks/ lower risks and WHO MEC category 4 criteria criteria)
- There are two types of risks one affecting the arterial system and one the venous system
- **VTE risk in healthy young women without contraception and in pregnancy**
 - EMAS recommendation: VTE risk according to progestin type and method of application
 - VTE risk according to estrogen dose and type of estrogen
 - Understand what is meant by a positive family history and what it means for risk counselling
 - VTE risk in women with thrombophilia
 - Overview risk for VTE in numbers and multiplication of risks
 - VTE risk with age, obesity and duration of CHC use
- **Arterial risk:** stroke and myocardial infarction in numbers, in relation to age and obesity
- Balancing risks against other contraceptive options and benefits during counselling

CHC III

- Contraceptive health benefits of CHCs
- Minor harmless side effects
- Treatment of side effects
- Major side effects / reasons to stop pill immediately
- VTE risk in newstarters and counselling for symptoms associated with DVT and PE
- Pill return visit
- Measurement of blood pressure

CHC IV: CVR,CTP

- Description and formulation; Application
- Pharmacokinetics; Regimen of use
- Similarities ring, patch and pill; Advantages ring and patch > pill
- Contraceptive failure rates
- Dosing errors; Extended use
- Concurrent use
- Cycle control; Acceptability; Compliance; Side effects compared with pill
- Device-related problems; Acceptability ring vs patch
- Venous and arterial thromboembolism
- Counselling

MC Mental disorders

- General considerations
- Feeding and eating disorders
- Psychotic disorders
- Some aspects of contraception in disabled women

POC Overview

- Progestin types
- Working mechanism
- Contraceptive efficacy and safety of POC
- Use in women with medical conditions
- Health benefits
- Adverse events: bleeding, breast tenderness, weight, acne, BMD

POP and DMPA

POP

- General characteristics of the desogestrel 75 µg POP
- Mechanism of action
- Contraceptive efficacy
- Health benefits, migraine
- Side effects, bleeding
- Emergency contraception
- Breastfeeding
- Summary

DMPA

- General characteristics of DMPA
- Contraceptive efficacy and duration of use
- Mechanism of action
- Contraindications
- Health benefits
- Safety
- Side effects and treatment
- Reasons for discontinuation
- Summary

POC Implant

- General characteristics of the ENG-releasing implant
- Mechanism of action
- Contraceptive efficacy
- Health benefits
- Contraindications
- Side effects and treatment, continuation
- Summary

MC Obesity, family history and VTE

Obesity

- Definition of obesity
- Obesity and VTE risk
- Which contraceptives are efficient in obese women
- Contraception after bariatric surgery

Family history and VTE

- Contraception after VTE
- Definition of positive family history for VTE
- Efficient and safe contraception if FH is positive
- VTE risk in women with positive FH

MC Women with HIV CHC and Drug interactions

HIV

- Main characteristics of HIV infection, classification and clinical stages of HIV infection
- Concerns regarding contraception:
 - Drug interaction
 - Possible impact on progression of HIV infection
 - Impact on HIV transmission and acquisition
 - Potential risks related to HIV infection/aids

Hormonal contraceptives and drug interactions

- Overview of the metabolism of the contraceptive steroids
- Pharmacokinetic drug interaction
- Interactions of CHC and POC with:
 - anti-epileptic drugs
 - psychotropic drugs
 - herbal remedies
 - antimicrobial therapy

IUD Overview

- Types of IUD
- Efficacy of IUDs and duration of use
- IUDs and PID risk, screening for STIs prior to insertion
- Need for antibiotic prophylaxis during insertion
- Pain management during IUD insertion
- When to insert (after abortion and pregnancy), switching from another method
- Risk factors, frequency of expulsion and dislocation, reinsertion after expulsion
- Post-insertion visit

Copper-IUDs

- Mechanism of action
- Efficacy, duration of use
- Side effects: harmless, harmful, frequency
- Treatment of side effect
- Contraindications
- Misconceptions
- Counseling
- Risk of ectopic pregnancy
- Copper ball and expulsion

LNG-IUS

- What is the hormone-releasing intrauterine system (IUS) and why was it developed
- General characteristics of the LNG-IUS
- Mechanism of action
- Contraceptive efficacy and duration of use
- Side effects: harmless and harmful, treatment
- Reasons for discontinuation
- Medical indications for LNG-IUS use

IUDs in special situations

- Adolescents
- Risk of cervical cancer risk (LSIL and HSIL)
- Women after STI or at increased risk of STI
- IUDs and cardiovascular disease
- Women with HIV
- Women with immunosuppression

MC Migraine and depression

Migraine

- Sex differences in epidemiology of migraine
- Prevalence of migraine
- Background of hormonal triggers for migraine
- Basics on diagnostic criteria for migraine
- WHO recommendation for CHC use in migraineurs
- Association between migraine and stroke
- When to stop CHCs in migraineurs
- Contraceptive options for migraineurs

Depression

- Definition of depression
- Prevalence in Europe
- How not to miss depression in taking a history
- Potential effects of contraceptive methods on the course of depression in women with depression as a pre-existing condition
- Which contraceptives may cause depressed mood

Female and male sterilisation

Female sterilisation

- Introduction
- Surgical planning
- Postpartum sterilisation
- Interval sterilisation
- Laparoscopic sterilisation

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- Hysteroscopic sterilisation Essure
 - Preoperative counselling
 - Contraceptive failure rates
 - Causes of failed sterilisation
 - Potential post-sterilisation effects
 - Risk of regret
 - Opportunistic bilateral salpingectomy

Male sterilisation

- Introduction
- Procedures and techniques
- Postoperative care
- Confirmation of sterility
- Contraceptive failure rates
- Contraindications
- Complications
- Associated morbidity concerns
- Counselling
- Vasectomy reversal

MC CHC breast and ovarian cancer

- Effect of CHC on breast cancer risk
- Effect of CHC on ovarian cancer risk
- CHC and breast cancer risk in women with hereditary breast cancer
- CHC and ovarian cancer risk in carriers of *BRCA1/BRCA2* mutations
- CHC and breast cancer risk in carriers of *BRCA1/BRCA2* mutations
- Contraceptive options for women after breast cancer

2. List of abbreviations

AOR	adjusted odds ratio
ART	antiretroviral therapy
ATE	arterial thromboembolic event
BN	bulimia nervosa
BMD	bone mineral density
BSO	bilateral salpingectomy
CD	caesarean delivery
CHC	combined hormonal contraceptives
COC	combined oral contraceptives
Copper-IUD	copper releasing devices
CTP	combined transdermal patch
CVR	combined vaginal ring
CVT	cerebral venous thrombosis
DMPA	depo-medroxyprogesterone acetate
DRSP	drospirenone
DSG	desogestrel
DVT	deep venous thrombosis
E2	estradiol
EE	ethinylestradiol
EMA	European Medical Agency
ENG	etonogestrel
EV	estradiolvalerate
FH	family history
FS	female sterilisation
GSD	gestoden
HC	hormonal contraceptives
HMB	heavy menstrual bleeding
IUD	intrauterine device
LNG	Levonorgestrel
LNG-IUS	Levonorgestrel-releasing intrauterine device (Mirena®)
MI	myocardial infarction
NGMN	norelgestromin
NOMAC	nomegestrol acetate
OR	odd ratio
PE	pulmonary embolism
PID	pelvic inflammatory disease
PND	postnatal depression
POC	progestin-only contraceptive
POP	progestin-only pill (includes only desogestrel 75 µg in our project)
PrEP	pre-exposure prophylaxis
RCT	randomised controlled trials
SHBG	sexual hormone binding globulin
STI	sexual transmitted disease
TL	tubal ligation
UPA	ulipristal acetate
VD	vaginal delivery
VTE	venous thromboembolism

3. Authors of the training tool

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Present position

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- Responsible for the outpatient clinic on FP and abortion at Obstetric Service A. Centro Hospitalar e Universitário de Coimbra. Portugal

Current and earlier tasks in ESC

- Member of Internal Scientific Committee of the European Society of Contraception and Reproductive Health (ESC)
- Member of ESC Expert Group on Sexual Medicine and Sex Education

Lete Lasa Luis Ignacio, Spain



Present position

- Head of Obstetrics and Gynecologic Department. University Hospital Araba. Vitoria. Spain
- Professor of Obstetrics and Gynecology. Basque Country University

Current and earlier tasks in ESC

- Deputy Editor of the European Journal of Contraception and Reproductive Health Care
- Past member of Board

Merki Gabriele, Switzerland



Present position

- Head of Family Planning and Adolescent Gynaecology, Clinic for Reproductive Endocrinology, University Hospital Zürich, Switzerland

Current and earlier tasks in ESC

- Current:
 - President
 - Board representative for Switzerland
- Earlier:
 - Vice-President
 - Board Member
 - Member of the Internal Scientific Committee
 - Member of the Expert Group on hormonal contraception
 - Co-organiser of the 2016 Basel Congress

Roumen Frans J.M.E., the Netherlands



Present position

- Gynaecologist Zuyderland Medical Centre, Heerlen, The Netherlands

Current and earlier tasks in ESC

- Editor European Journal of Contraception and Reproductive Health Care
- Vice-president local organizing committee ESC Congress, The Hague, 2010

Sedlecky Katarina, Serbia



Present position

- M.D., PhD, specialist of obstetrics and gynaecology
- Senior adviser in the Family Planning Centre, Institute for Mother and Child Health Care of Serbia, Belgrade

Current and earlier tasks in ESC

- Board member 2006-2014
- Executive committee member:
 - Assistant treasurer 2008-2010
 - Secretary general 2010-2014
- Member of ESC Expert Group on Sexual Medicine and Sex Education 2014 -

4. Instructions how to use the cases in workshops

Group discussion cases

Introduction: Though effective presentations are important, even more important is communicating well in group settings because that is where most work is completed. In this exercise, you'll work in a group of 3 individuals to resolve several realistic patient problems on contraception as you'll encounter in your daily practice.

Purpose: To inform adequately and evidence-based the woman with questions on her specific contraceptive problem and to provide her with a tailor-made contraceptive advice in an open communication.

Sheets:

1. Patient's sheet: includes some information on the patients situation and her key issues
2. Doctor's sheet: provides information to answer the patient correctly
3. Information sheet (for the observer): includes information on
 - How to complete the history and identify important information about the patient's background
 - The contraceptive methods addressed in the case including adverse events, contraindications and benefits

Role of the 3 participants:

1. **The patient:** provides information on her condition and puts the questions, as provided on the patient's sheet. She communicates with the doctor and asks additional questions to resolve problems.
2. **The doctor:** gathers as much information as possible on personal situation, risk factors and medical conditions of the patient, answers her questions, and provides her with a tailor-made contraceptive advice. The doctor has a copy of the patient's sheet and the doctor's sheet. He can ask the observer for additional information from the information sheets, if necessary.
3. **The observer:** evaluates if the communication of the doctor with the patient is clear and understandable for the woman, adequate and evidence-based, and complete. He can make suggestions for improvement, based on the patient's sheet, the doctor's sheet and the information sheet he has received.

The teacher has a copy of all sheets. His tasks are:

1. to organize the group discussion by deciding who is playing which role
2. to hand over the patient's sheet to all three participants
3. to hand over the doctor's sheets to the doctor
4. to hand over all sheets to the observer only
5. to give any support to the participants where needed
6. to watch the time schedule
7. to evaluate the experiences of the 3 participants with the case