



# Birth control in university students

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**Student services: supporting students in education, removing thresholds and concerns, preventing drop out, creating opportunities, healthy minds in healthy bodies**

# Opportunities to address the issue

- “I might be pregnant”
- “I did something I wish I hadn’t”
- “I would like a pill prescription”
- “I’d like to go on a contraceptive”
- “our condom got lost”
- “I’m not happy with my actual birth control”
- “I hate my periods / acne”
- ...

# context

## Our patients

- Active, literate, adventurous, ambitious young women
- No immediate reproduction urge
- Focus on self-development
- Consecutive, simultaneous or loose relations

## Our means

- Variety of contraceptives
- Culture, common practice, training and knowledge, availability

# Flanders region

Vast majority of hormonal contraceptives

- Easily available
- Accepted as safe and reliable
- Shift from pills to newer methods

Non hormonal methods

- Copper IUD
- Barrier methods: condom, diaphragm, cervical cap
- Natural family planning

# Contraception methods



Condom



Female condom



Oral contraception



Hormonal ring



IUD



Contraceptive injection



Surgical sterilization



Implant



Coitus



Calendar rhythm



Vaginal



Contraceptive patch



Diaphragm / cap

## Hormonal contraceptive challenges of the 21<sup>st</sup> century: many different options

- Combined EE + P
  - Combined oral contraceptive
  - Vaginal ring
  - Transdermal patch
- P only
  - Progestogen only pill
  - Dermal implant
  - Hormonal IUD
  - Injections

## Hormonal contraceptive challenges of the 21<sup>st</sup> century: pro's en contra's

- Highly effective when used correctly
- Well tolerated
- Safe profile in low risk women
- Positive side effects
  
- False rumours and urban legends
- (wrong) ideas, concerns and expectations
- No STI prevention



So, what is the best choice?

# Some research on patients preferences



Research on preferences – article 1

# Attitudes, awareness, compliance and preferences among hormonal contraception users

David J. Hopper (Schering corporation)  
Clin Drug Investig 2010: 30(11): 749-763

# Set up

- Cross-sectional survey
- Aim: assess attitudes, awareness, compliance and preferences
- US, UK, France, Germany, Spain, Italy, Brazil, Australia, Russia
- 5120 women
  - Mean age 31y
  - 70% current users
  - No intention for pregnancy next 3y
  - Desired quick return of fertility
- Self-administered online questionnaires

# results

- 42% prefers effectiveness over cycle control
- 58% accepts irregular bleeding if less frequent
- 53% was concerned about additional EE
  - 80% considers switch to lower EE
  - 74% prefers POP to avoid EE side effects
- up to 67% admits wrong intake in last 3 months
- 85% prefers low dose monthly application over daily pill
- 81% would consider long term method
- 30 to 86% considers themselves well informed

# conclusions

- Individualized counselling
- Tailored to personal preferences to improve
  - Compliance
  - Continuation
  - Prevention of unwanted pregnancy

Research on preferences – article 2

# The contraceptive CHOICE project round up: what we did and what we learned

Colleen McNicholas, Tessa Madden, Jeffrey F. Peipert  
Clinical obstetrics and gynecology, 57, 4, 635-643, 2014

# Set up

- Prospective cohort study
- Aim: less unintended pregnancies through LARC by reducing barriers (cost, knowledge, access)
- St Louis area, MO, US
- 9256 women of high risk population
- free contraceptive of choice for 2 to 3 years
- Telephone survey month 3, 6, 12, 18, 24, 30, 36



# results

- Underestimating LARC effectiveness vs overestimating pill-patch-ring effectiveness
- <5% LARC in local population before launch, 46% choose LARC at baseline enrollment
- Dramatically higher continuation rates and satisfaction with LARC after 12 and 24 months
- Dramatic drop in failure rates with LARC vs non LARC methods
- Dramatic drop in regional abortion numbers
- Students: 18-20y group preferred LARC, similar continuation rate and satisfaction as older women
- Less visits = less STI screening

# conclusions

- Remove barriers
  - Knowledge
  - Cost
  - Access
- Preference for most effective and user-independent methods in all ages
- Higher continuation rates and satisfaction, leading to less unintended pregnancies
- Adapt STI screening to fewer doctor visits

# Some reflections



# “1 g of empathy is worth 1g of knowledge”

- Techniques: counselling and practical skills
- We are the advisers, we are the suppliers, but we are not the deciders
- Time
- Confidentiality
- Rare need for clinical breast or pelvic examination

© John Guillebaud and Anne MacGregor, “Contraception, your questions answered”, 7<sup>th</sup> edition, Elsevier, 2017, ISBN 978-0-7020-7000-6

Important knowledge

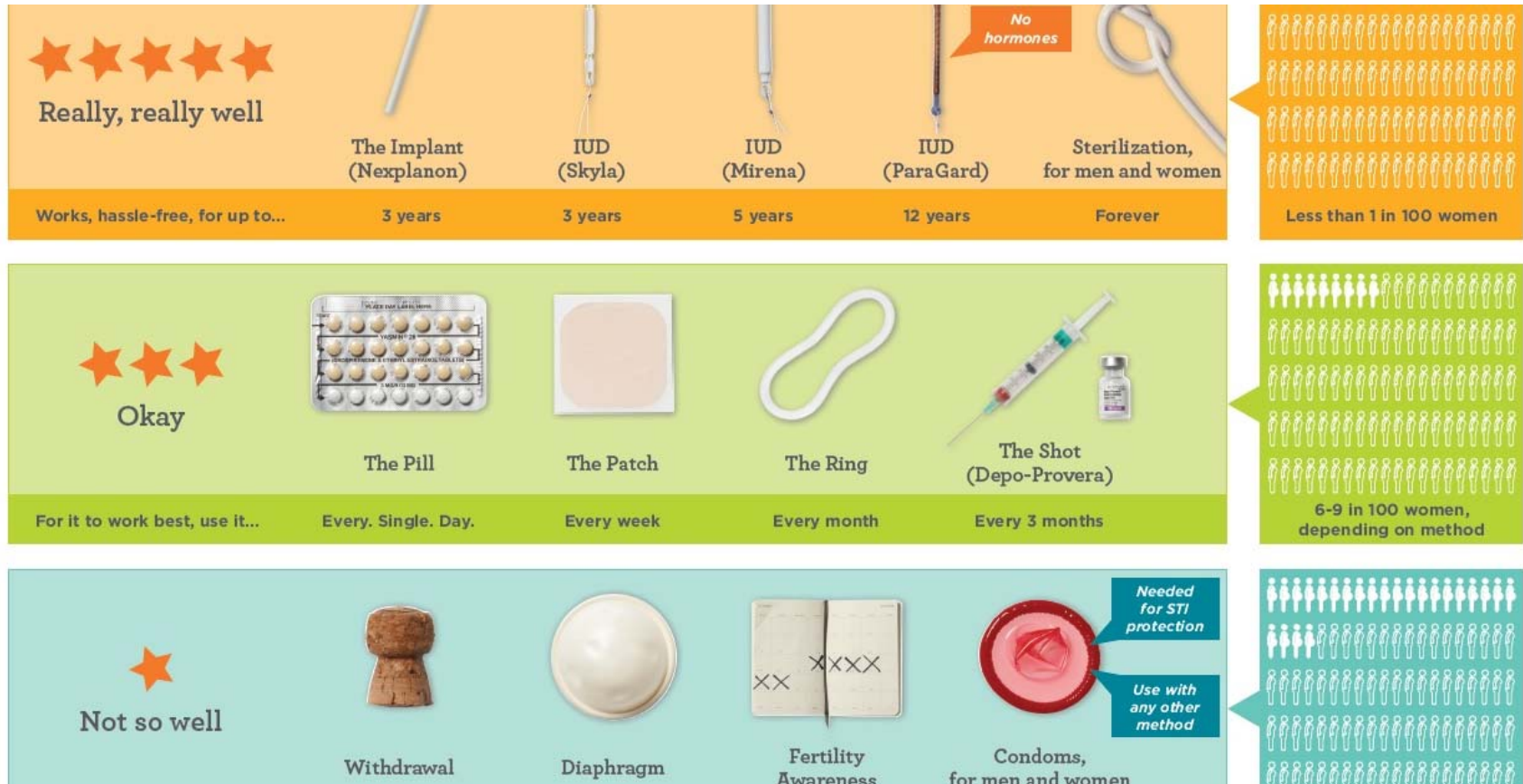


# Effectiveness is high

- Theoretical effectiveness is similar for all methods
- Factual effectiveness is user dependent
  - Compliance: assess motivation, understanding, access, follow-up
  - Interactions with other medication
    - Enzyme inducers (most tuberculostatics and anti-epileptic drugs (not: valproate)): only LN-IUD is safe
    - Anti-retroviral drugs: progestogen only methods are safe
    - Saint John's wort: controversial
    - Ulipristal: use condom until end of cycle, interaction with P used 7 days before until 5 days after



Reliability could be user dependent.



These are the statistics: user-independent = more reliable





“Well, yes, right, ... “  
The unlucky individual versus statistics.

# Serious health risks are rare

- Most important complication is venous thrombo-embolism
  - 5/100 000 women years in non-pregnant non-users
    - x2 to x3 in second generation and x3 to x5 in third generation
    - x10 in pregnancy and x20 after delivery or abortion
  - Dose related effect of EE, influenced by P-combination, not with P-implant or LN-IUD
  - Risk factors:
    - Personal or family history
    - Age, BMI, smoking, immobilisation, surgery, cancer
- Other cardiovascular effects
  - AMI: EE related, not with POP
  - CVA: EE related, not with POP
- Cancer
  - Lower risk of ovary-, endometrium- and colorectal cancer
  - Higher risk of cervical and possibly breast cancer
  - Positive effect on overall cancer risk

# Mild side effects are more common

- Estrogen related
  - Irregular bleeding: higher EE dose or switch to 3rd generation P
  - Nausea/bloated feeling: lower EE dose or switch to 2nd generation P
  - Headache
  - breast tenderness
- Progestogen related:
  - Acne: no difference between P, overall positive effect
  - weight changes: lower P, similar for most P, worse with injections and implant
  - Moodswings: higher EE dose or switch to 3rd generation P
  - loss of libido: unclear, avoid cyproterone acetate

# Get started

- **Assess ICE and preferences**
- **Assess possible pregnancy or STI (risk)**
- inform, facilitate choice and provide
- Get started
  - CC and POP
    - First 5 days of cycle: always reliable
    - Quick start:
      - rule out pregnancy
      - barrier method for 7 days(COC), 2 days(POP), 9 days(natural E)
  - IUD
    - Be familiar with procedure
    - any day if pregnancy ruled out
    - LN-IUD: barrier method for 7 days if after D7



Never forget the added value of these.

conclusion



The best choice is her choice.