UNIVERSITY OF KWAZULU-NATAL ™
INYUVESI YAKWAZULU-NATALI

Contraceptive options for Teenagers & young women

Mala Panday

health
Department:
Health
PROVINCE OF KWAZULU-NATAL

FIGHTING DISEASE, FIGHTING POVERTY, GIVING HOPE

Adolescence….

Transitional period between childhood and adulthood (10-19)
Time of rapid

- physical growth (puberty)
- cognitive changes - ability to think abstractly and multi-dimensionally
- Social maturation - a period of preparation for adult roles.

Time of more pleasure seeking and risk taking behavior
Time of egocentrism
(Wikipaedia)

Social media

- **2012 -**

- 73% of 12–17 year olds reported having at least one social networking profile
- 68% of teens texted every day
- 51%visited social networking sites daily
- 11% sent or received tweets at least once every day
- 23% were "heavy" social media users, meaning they used at least two different types of social media every day

- **2018 -**

- 97% use social media
- 70% of teenagers checked social media several times a day
- 45% are online constantly

1.Reich SM et al. March 2012 "Friending, IMing, and Hanging Out Face-to-Face: Overlap in Adolescents' Online and Offline Social Networks". Developmental Psychology. **48** (2): 356–368. doi:10.1037/a0026980. PMID 22369341
2. "Teens are avid, daily users of social media". Social Media, Social Life: How Teens View Their Digital Lives. Common Sense Media.
3. Richter F 2018 Teens' Social Media Usage Is Drastically Increasing. Statista

Social Media – Negative health effects

- Social development - replaces face-to-face communication, impairs their social skills, alienation & unsafe interaction with strangers & cyberbullying
- Interference with sleep and homework
- 32% of adolescent girls that use Instagram reported feeling worse about their body image after using the platform
- Sexting is the new “first base”
- Sexual dysfunction on the rise in young people 48% ♀ 23% ♂
- Privacy concerns
- ? Barrier to making healthy sexual reproductive health decisions

Milton AC et al, Sexting, Web-Based Risks, and Safety in Two Representative National Samples of Young Australians: Prevalence, Perspectives, and Predictors JMIR Ment Health 2019;6(6):e13338) doi: 10.2196/13338
American Academy of child and adolescent psychiatry 2018 Social media and teens.
Moreau et al. Sexual dysfunction among youth: an overlooked sexual health concern BMC Public Health (2016) 16:1170 DOI 10.1186/s12889-016-3835-x

Sexual Reproductive Health

- WHO “SRH is a human right and a key intervention for improving the health of women and children”
- SRH should allow an autonomous, safe and pleasurable sex life for all but this is not the case especially for adolescents

WHO Regional Office for Europe and BZgA. Standards for Sexuality Education in Europe. A framework for policy makers, educational and health authorities and specialists. Cologne: The Federal Centre for Health and Education, BZgA; 2010;Available from: http://www.oif.ac.at/fileadmin/OEIF/andere_Publikationen/WHO_BZgA_Standards.pdf.

Adolescent Pregnancy

- Teenage pregnancy and abortion rates have decreased in many countries since the 90s
- Unintended pregnancy rate remains too high
- Adolescents account for 11% of births
- 12 million girls give birth annually in developing countries[1]
- Worldwide, complications associated with pregnancy and childbirth represent the second highest cause of death among 15-19 year old females[2]
- In SA 83% of girls 15-19yrs are sexually active & 43% used contraception[3]
- In some surveys adolescent pregnancy rate 19.2%[4]
- 106 383 registered live births among adolescents 10-19 years in 2019. KZN:24,7%. [5]

1. Darroch J, Woog V, Bankole A, Ashford LS. Adding it up: Costs and benefits of meeting the contraceptive needs of adolescents. New York: Guttmacher Institute; 2016.
2. WHO Adolescent pregnancy. Fact Sheet no. 364; Available from: http://www.who. int/mediacentre/factsheets/fs364/en/#.
3. Chersich Mfet al. Contraception coverage and methods used among women in South Africa: A national household survey. S Afr Med J 2017;107(4):307-314. DOI:10.7196/SAMJ.2017.v107i4.12141
4. Mchunu G et al, Adolescent pregnancy and associated factors in South African youth African Health Sciences 2012; (4): 426 – 434 http://dx.doi.org/10.4314/ahs.v12i4.5
5. Stats SA Census 2022

Table 1. Deliveries and terminations of pregnancy in adolescent girls aged 10 - 19 years in the public sector, South Africa, 2017/18 - 2021/22 (source: District Health Information System)

	2017/18	2018/19	2019/20	2020/21	2021/22*	Increase 2017/18 - 2020/21, %
Mid-year population 10 - 14 years, *n*	2 546 451	2 628 874	2 689 346	2 769 793	2 806 206	8.8
Mid-year population 15 - 19 years, *n*	2 304 256	2 372 843	2 316 027	2 371 690	2 439 133	2.9
Mid-year population 10 - 19 years, *n*	4 850 707	5 001 717	5 005 373	5 141 483	5 245 339	6.0
Deliveries 10 - 14 years, *n*	2 726	3 527	3 870	4 053	2 226*	48.7
Deliveries 15 - 19 years, *n*	114 329	121 059	127 028	134 267	70 656*	17.4
Deliveries 10 - 19 years, *n*	117 055	124 586	130 898	138 320	72 882*	16.8
Terminations 10 - 19 years, *n*	12 896	14 441	16 301	13 972	7 211*	8.3
Pregnancies 10 - 19 years, *n* (deliveries plus terminations)	129 951	139 027	147 199	152 292	80 093*	16.1
Delivery rate 10 - 14 years, per 1 000	1.1	1.3	1.4	1.5	1.6	
Delivery rate 15 - 19 years, per 1 000	49.6	51.0	54.8	55.6	57.9	
Delivery rate 10 - 19 years, per 1 000	24.1	24.7	25.8	26.6	27.8	
Pregnancy rate 10 - 19 years, per 1 000	26.8	27.8	29.4	29.6	30.5	

*The numbers in 2021/22 for deliveries and terminations are for the period 1 April 2021 - 30 September 2021, a 6-month period. To enable calculation of annual rates, these numbers were extrapolated (doubled).

Barron P et al. Teenage births and pregnancies in South Africa, 2017 - 2021 – a reflection of a troubled country: Analysis of public sector data SAMJ April 2022, Vol. 112, No. 4

Fertility regulation

Psychiatric illness

HIV

Death

Social

Minor disorders of pregnancy

Hospitalisation

Abortion

Economical

Congenital anomalies

VTE 4-10 x OCP

Miscarriage

Stillbirths

ANAEMIA

Lack of education

DM

Malignancy

Infant mortality & morbidity

HYPERTENSION

Morbidity
Anaemia
Weight gain

Mortality

School Drop out

HIV
Acquisition

Psychological
disorders

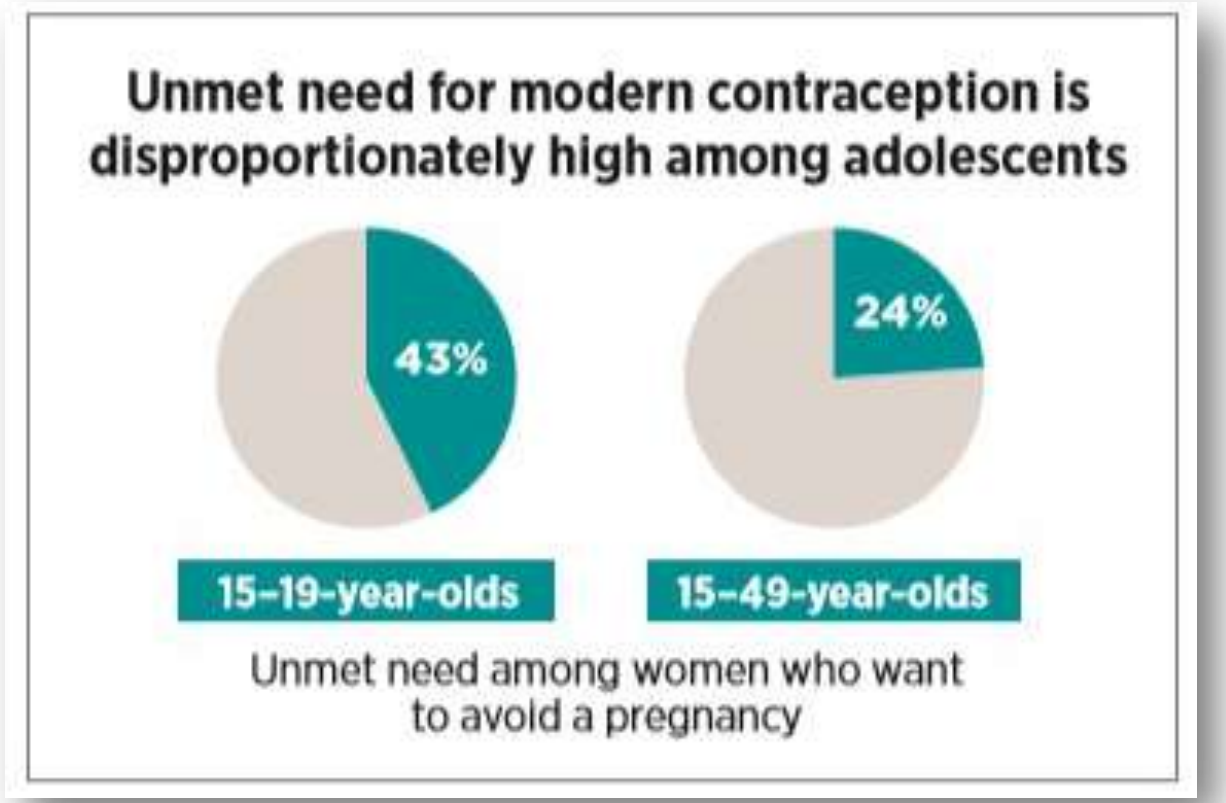
Bullying &
isolation

Abuse

Rapid repeat
pregnancy

Financial
dependence &
unemployment

Poor ANC &
birth
outcomes



Sully EA et al., Adding It Up: Investing in Sexual and Reproductive Health 2019, New York: Guttmacher Institute, 2020.

Barriers to access SRH

Individual

Fear to reveal sexual activity
Ambivalence Underestimation of risk
Poor knowledge and info
Substance abuse
Side effects
Lack access to mass media
Coitarche

HCP

Low levels of LARCS
Lack of skills
Moralistic Attitudes
Poor counselling skills

Education

Restrictive vs comprehensive education
Poor quality
Social media

Political

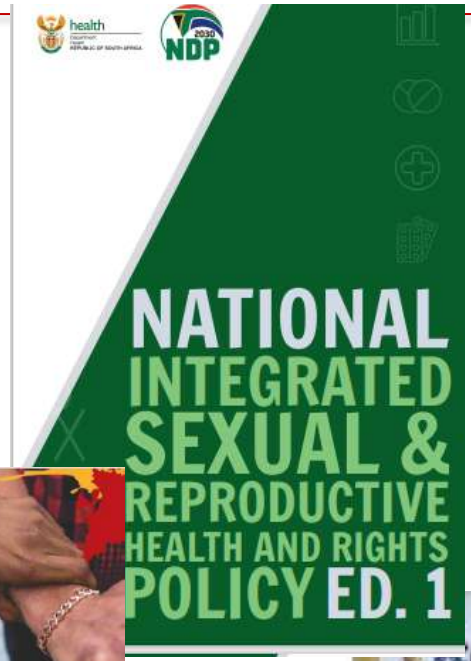
Health & School Policy
Policy to Practice
Youth friendly services
Cost
Awareness
Laws
Poverty

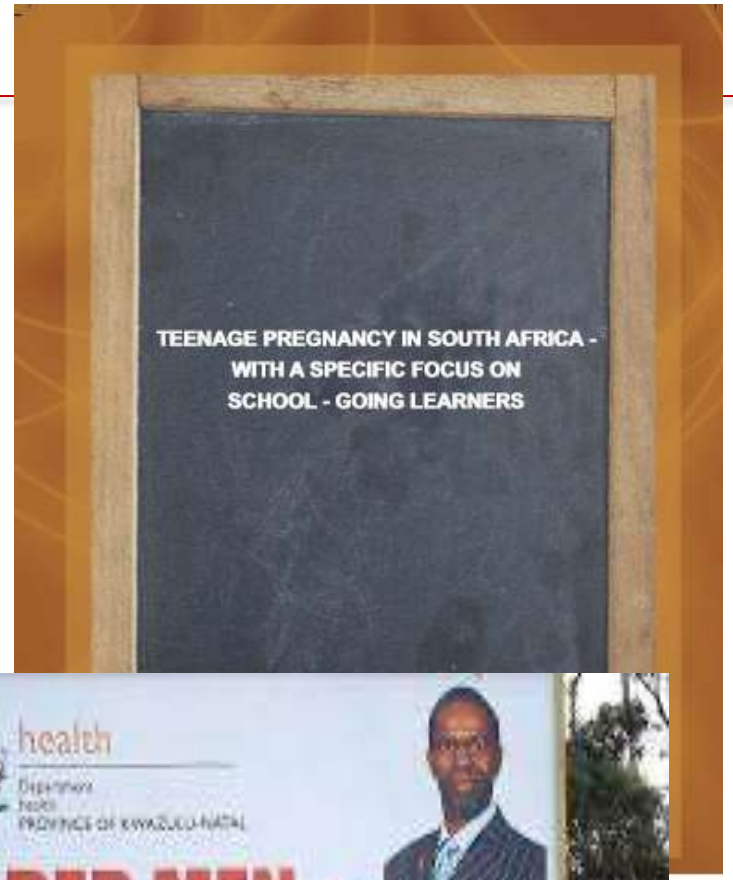
Sociocultural

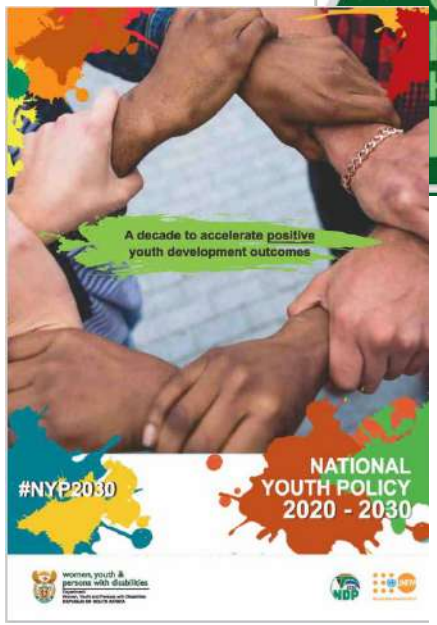
Poor advice
Myths & Misconceptions
Stigma & Taboo
Religion
Peers
Race
Gender inequality

Government Strategies to ↑ teenage contraceptive Uptake

- Enabling legal framework & policies
- Improving staff skills
- Intensive evidenced based school education programs
- Campaigns
- Partnering – mass media, NGO
- Youth Friendly/mobile clinics
- Outreach
- Availability

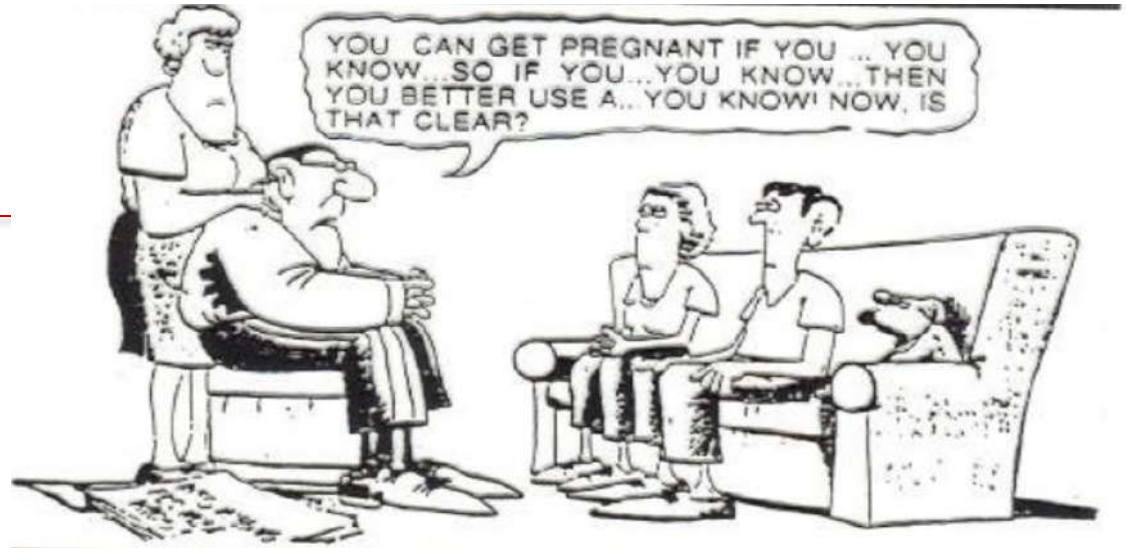






IMPACT

Sexuality Education



- Starts from early childhood - parents
- A rights based approach which aims to support and protect sexual development
- Gradually equip and empower young people with information, skills and positive values to understand and enjoy their sexuality, have safe and fulfilling relationships and take responsibility for their own and other people's sexual health and well-being

Izdebski, Z.; Dec-Pietrowska, J.; Kozakiewicz, A.; Mazur, J. What One Gets Is Not Always What One Wants—Young Adults' Perception of Sexuality Education in Poland. Int. J. Environ. Res. Public Health 2022, 19, 1366. https://doi.org/10.3390/ ijerph19031366

WHO Regional Office for Europe and BZgA. Standards for Sexuality Education in Europe. A framework for policy makers, educational and health authorities and specialists. Cologne: The Federal Centre for Health and Education, BZgA; 2010; [cited 2016 Jul 4]. Available from: http://www.oif.ac.at/fileadmin/OEIF/andere_Publikationen/WHO_BZgA_Standards.pdf.

Topics

Cognitive, emotional, physical and social aspects of human sexuality.

- Biological aspects – anatomy, physiology, menstrual cycle, pregnancy
- Sexual orientation
- Sexual rights
- Gender equality
- Emotions and relationships
- Personal limit setting
- Sexual response
- Effective contraception
- Prevention of STIs

Internet & Social media – an opportunity?

- Distorted, unbalanced and unrealistic information on sex
- Presents a significant opportunity to support the delivery of contraceptive education and aid compliance
- Computerised counselling aids or apps can allow adolescents to work their way through a series of questions to identify the most suitable contraceptive methods for them, can increase knowledge and save time in the clinic.

Kofinas JD et al. Adjunctive social media for more effective contraceptive counseling: a randomised controlled trial. Obstet Gynecol. 2014;123:763–770.
Gilliam ML et al. Development and testing of an iOS waiting room 'app' for contraceptive counselling in a Title X family planning clinic. Am J Obstet Gynecol. 2014;211:481.e1–e8.
Society of Obstetricians and Gynaecologists of Canada (SOGC). SexualityandU; Available from: http:// www.sexualityandu.ca/games-and-apps/s-o-s-stay-on-schedule
Chewning B et al. Evaluation of a computerised contraceptive decision aid for adolescent patients. Patient Educ Couns. 1999;38:227–39.

Informed Choice

- Education ↑ demand without access = ↑ UMNC
- The Contraceptive CHOICE Project (n=9256):
- Looked at overcoming barriers to effective contraception – Knowledge, cost and access
- when teens 14–17 years (n=1404) were offered the method of their choice at no cost 72% chose a LARC method with continuation rate of 81% at 12 months
- The teen pregnancy rate was 34.0 per 1,000 teens compared to the national average of 158.5 per 1,000 teens.
- Additionally, the abortion rate was 9.7 per 1,000 teens compared to the national average of 41.5 per 1,000 teens.

MORE THAN 75% REDUCTION

Mestad R, Secura G, Allsworth JE, et al. Acceptance of LARC methods by adolescent participants in the Contraceptive CHOICE Project. Contraception. 2011;84:493–498.

Approach to Counselling

GREET	Greet and make her feel welcome. Build a rapport by greeting her and making her feel comfortable.
ASK	Ask questions in a friendly manner using words that she will understand. Listen patiently, without being judgmental. Identify her needs by asking relevant questions about personal, social, family, medical and reproductive health including reproductive tract infections, STIs, family planning goals and past/current use of contraceptive methods.
TELL	Tell her the relevant information that will help her to make an informed choice regarding contraception method.
HELP	Help her to make a decision and provide other related information, for example, how to protect herself from STIs.
EXPLAIN	Explain about the contraceptive method in detail including about its efficacy and potential side effects, and check understanding of how it should be used.
RETURN	Return for advice, further questions or need for information or discussion around a change in circumstances is encouraged.

Rinehart W, Rudy S, Drennan M, GATHER Guide to Counselling. Population Reports 1998, Series J, No. 48. Baltimore, Johns Hopkins University School of Public Health, Population Information Program, December 1998.

HCP Adolescent Consult

This is a powerful opportunity to provide accurate SRH information, address misperceptions and assist with the behavioral skills to negotiate safer sexual practices with their partner(s). Provides a positive, educational, inspirational, nonjudgmental experience can influence entire future SRH

The Consult

- Rapport
- Skill
- Confidentiality & non coercive
- Youth friendly – times, staff, peer providers, social media
- Counselling - Address myths, misconceptions, concerns
- Discuss all options LARCS first incl. Abstinence
- Risk assessment
- Integrate - screening, vaccination, prevention
- Reinforce - Information leaflets, educational videos

ACOG 2017 Counselling adolescents about contraception

Special Considerations

- No method is contra-indicated just on age
- Dual contraception to prevent STIs
- Pelvic exam not always required
- SE – counselling and MX
- Quick start & extended prescriptions
- Follow up visit
  - open door policy, counselling, SE
  - adherence strategies – cell phone reminders
- Access to safe TOP facilities

Todd N et al. Contraception for Adolescents J Clin Res Pediatr Endocrinol 2020;12(Suppl 1):28-4
ACOG 2017 Counselling adolescents about contraception

CLASSIFICATION OF CONTRACEPTIVE METHODS

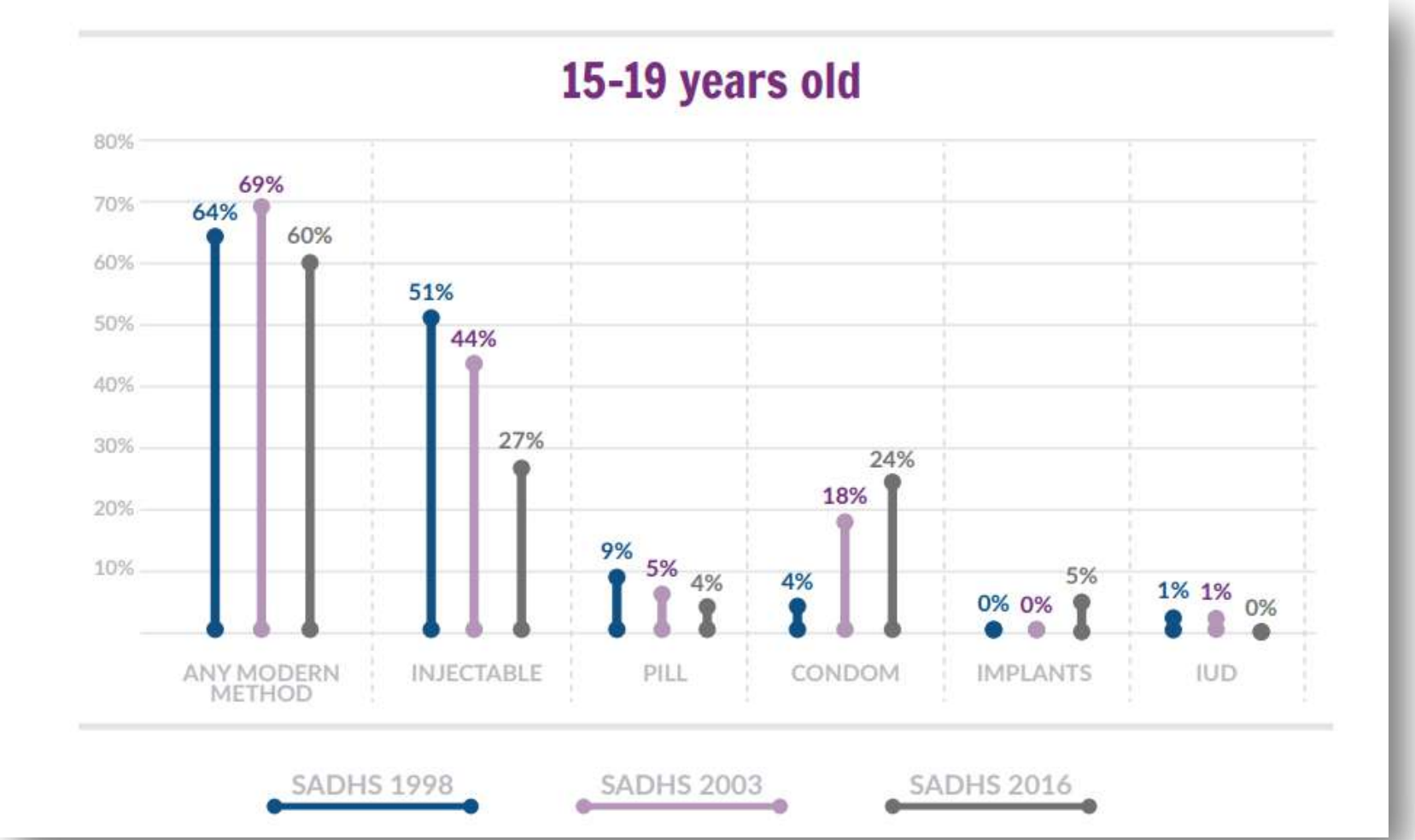
- **HORMONAL**
  - Oral - CHC / POP
  - Patch
  - Vaginal Ring
  - Long Acting
    - Injectables
    - Hormonal IUS
    - Implants
- **NON HORMONAL**
  - IUD
  - Sterilisation
  - Barrier
  - Natural
- **EMERGENCY CONTRACEPTION**
  - **Hormonal**
  - **IUD**

MOA

- Mainly - Inhibition of Ovulation
- Changes in Cervical Mucus
- Thinning of the Endometrium
- IUD – sperm motility, spermicidal, endometrial
- IUS

Method	% of women experiencing an unintended preg within 1st yr of use		% of women continuing use @ 1 year
	Typical use	Perfect use	
No Method	85	85	
Spermicides	29	18	42
Withdrawal	27	4	43
Female condom	21	5	49
Male condom	15	2	53
OCP	8	0.3	68
Depo provera	3	0.3	56
Copper T	**0.8**	**0.6**	**78**
LNG-IUS	**0.2**	**0.2**	**80**
Implanon	**0.05**	**0.05**	**84**
BTL	0.5	0.5	100

Contraceptive methods used by adolescents in SA



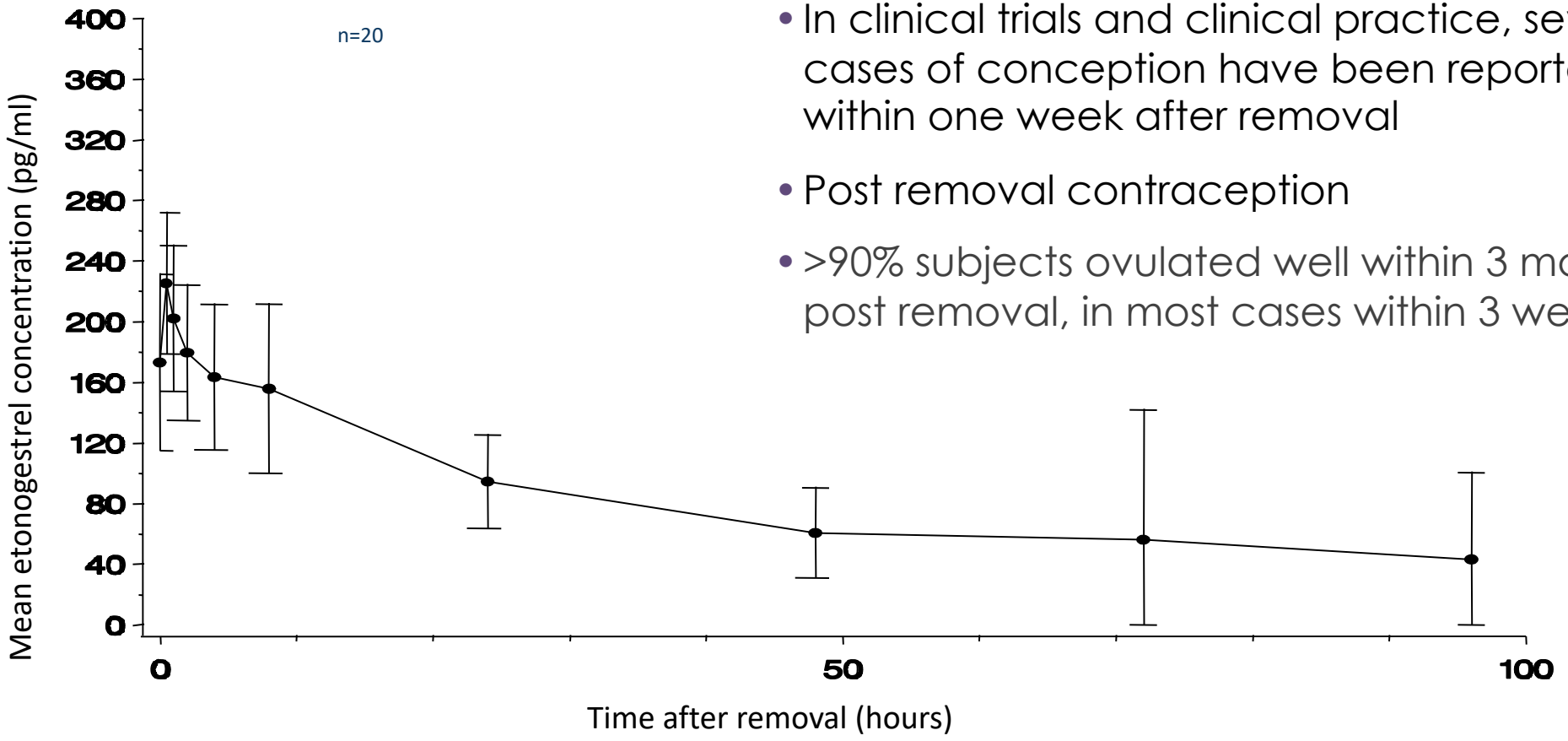
Implants

- Safe, Highly effective LARC – 3yrs
- Single radiopaque progestogen only subdermal implant preloaded in a disposable applicator.
- Convenient, Non user dependent, Easily Reversible
- Ideal to get through school
- Accessibility
- Confidential
- No effect on BMD
- Acne, dysmenorrhea (77% ↓)
- Nuisance bleeding
- Immed PP - Significantly↓ rapid repeat pregnancies with high continuation rates[1]
- decreases barriers to access *(ACOG, CDC)*

1. Tocce KM, Sheeder JL, Teal SB. Rapid repeat pregnancy in adolescents: do immediate postpartum contraceptive implants make a difference? Am J Obstet Gynecol 2012;206:481.e1-7.

Quickly Reversible

- Etonogestrel levels undetectable within 1 week after removal
- Rapid Return to pre existing fertility usually within 3 weeks
- In clinical trials and clinical practice, several cases of conception have been reported within one week after removal
- Post removal contraception
- >90% subjects ovulated well within 3 months post removal, in most cases within 3 weeks



Graesllin et al. Eur J Contracep & Reprod Health, 2008
Data on File
Davies et al. Contraception, 1993

Contraindications

- Known or suspected pregnancy
- Active venous thromboembolic disorder
- Known or suspected sex steroid sensitive malignancies
- Presence or history of liver tumors (benign or malignant)
- Presence or history of severe hepatic disease as long as liver function values have not returned to normal
- Undiagnosed vaginal bleeding
- Hypersensitivity to the active substance or to any of the excipients of IMPLANON NX® (etonogestrel implant)

Tolerability

- 80% Continuation rate at 1 year
- Overall discontinuation rate 32.7%

1st year	2nd year	3rd year
18%	30%	36%

Adverse Events

System organ class	Very Common> 1/10	Common < 1/10 to ≥ 1/ 100
Infections	Vaginal Infections	-
Metabolism and nutritional disorders	-	Increased appetite
Psychiatric disorders	-	Affect lability, depressed mood, nervousness, libido decreased
Nervous system	Headache	dizziness
Vascular disorders	-	Hot Flushes
Investigations	Decreased Weight	Increases Weight
Skin and Subcutaneous tissue	Acne,	Alopecia
Reproductive system and Breast	Breast tenderness, breast pain, irregular menstruation	Dysmenorrhoea, ovarian cyst
General disorders and administration site condition		Implant site pain, implant site reaction, fatigue, influenza like illness, pain

Reasons For Discontinuation

- Similar to other implants
- In first 6 months - for irregular bleeding and AE
- In the 3rd year - planning pregnancy

AE	13.9%
Irregular Vaginal Bleeding	10.4%
Planning a pregnancy	4.1%

Predictability of menstrual pattern

- Regular bleeds 1:3
- Infrequent bleeds 1:3
- Amenorrhoea 1:5
- Nuisance bleeds 1:5

Type of AUB	%
Amenorrhoea	22.2
Infrequent Bleeding	33.6
Frequent Bleeding	6.7
Prolonged Bleeding	17.7

Management of menstrual Irregularities

- Pre insertion counselling !!!!
- Menstrual calendar
- Detailed history and directed exam
- High dose short course oestrogen
- NSAIDS
- Doxycycline (MMPI)

} combine

- High dose/ cyclical progesterone
- COC
- Tranexamic acid rarely for heavy bleed
- Remove

Drug interactions

- Liver enzyme inducers may increase clearance of sex steroids
- Phenytoin
- Carbamazapine
- Rifampicin
- ARVs (efavirenz)

Position Client Prior to Insertion

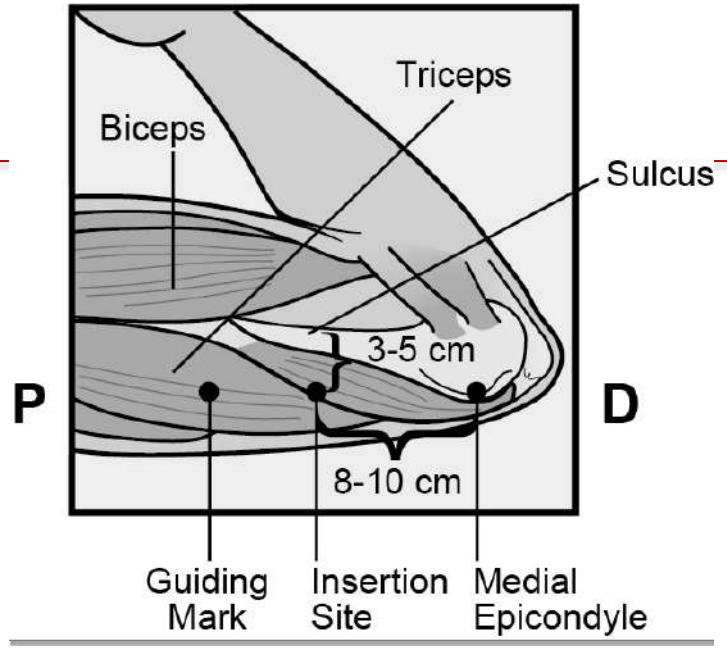
To help make sure the implant is inserted just under the skin, the healthcare providers should be positioned to see the advancement of the needle by viewing the applicator from the side and not from above the arm. From the side view, the insertion site and the movement of the needle just under the skin can be clearly visualized.

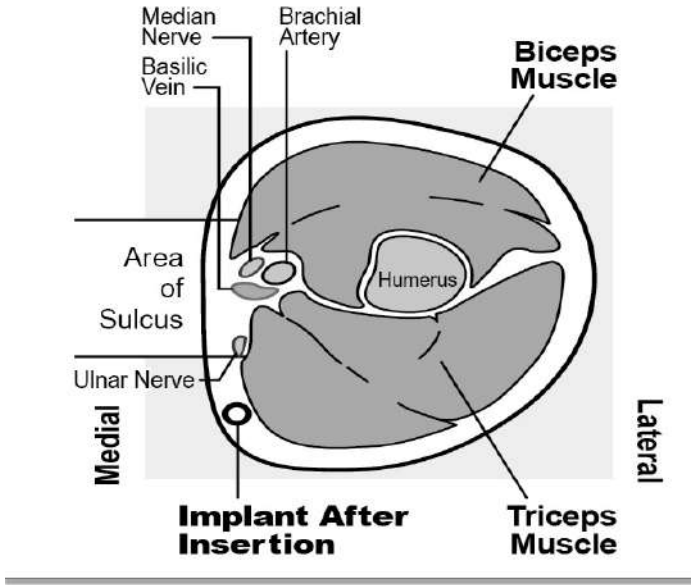
Identify the Insertion Site

- Identify the insertion site, which is at the inner side of the non-dominant upper arm. The insertion site is overlying the triceps muscle about 8-10 cm (3-4 inches) from the medial epicondyle of the humerus and 3-5 cm (1.25-2 inches) posterior to the sulcus (groove) between the biceps and triceps muscles

- This location is intended to avoid the large blood vessels and nerves lying within and surrounding the sulcus. If it is not possible to insert the implant in this location (eg, in women with thin arms), it should be inserted as far posterior from the sulcus as possible

- **The implant should be inserted subdermally just under the skin**





Complications of Insertion and Removal

- **Some bruising, slight local irritation, pain or itching**
- **Fibrosis,** a scar or an abscess may develop
- **Paresthesia** or paresthesia-like events may occur
- There have been reports of **migration of the implant** within the arm from the insertion site, which may be related to a deep insertion or external forces (eg, manipulation of the implant or contact sports)
- There also have been rare postmarketing reports of implants located within the vessels of the arm and the pulmonary artery, which may be related to deep insertions or intravascular insertion

IUD

- Highly effective LARC
- Immediately effective & reversible
- Hormonal or non hormonal
- Confidential, not user dependent
- Client must be counselled – self checks
- Cost effective
- Higher continuation rates
- Safe to use in nullipara & adolescents ~ infection & complication rates
- PPIUD safe, high uptake & cont rates, prevents RRP
- EC
- No drug interactions

Deans EI, Grimes DA. Intrauterine devices for adolescents: a systematic review. Contraception 2009; 79:418.
Díaz J, Pinto Neto AM, Bahamondes L, et al. Performance of the copper T 200 in parous adolescents: are copper IUDs suitable for these women? Contraception 1993; 48:23.
Birgisson NE, Zhao Q, Secura GM, et al. Positive Testing for Neisseria gonorrhoeae and Chlamydia trachomatis and the Risk of Pelvic Inflammatory Disease in IUD Users. J Womens Health (Larchmt) 2015; 24:354.

IUD

- IUS 52mg available in public sector
- added advantage of reducing HMB, dysmenorrhea, anaemia, missing school due to menstruation, need to buy sanitary towels
- IUD assoc with increase pain at insertion in nullipara
  - Verbal anaesthesia
  - Paracervical block
- Kyleena

1. Thonneau P et al factors for IUD failure: results of a large multicentre case–control study. Hum Reprod. 2006;21(10):2612–2616 60.
2. Suhonen S et al Clinical performance of a levonorgestrel-releasing intrauterine system and oral contraceptives in young nulliparous women: a comparative study. Contraception. 2004;69(5):407–412

Kyleena

- Strong evidence, multinational research n=2884
- 19.5mg releasing 12ug/d for 5yrs
- Pearl index 0.29 (high efficacy)
- Mainly local action
- **Smallest** T-body & **narrowest** insertion tube
- Favorable safety profile

Gemzell-Danielsson K, *et al*. A randomized, phase II study describing the efficacy, bleeding profile, and safety of two low-dose levonorgestrel-releasing intrauterine contraceptive systems. *Fertil Steril*. 2012 Mar;97(3):616-622.

Nelson A, *et al*. Two low-dose levonorgestrel intrauterine contraceptive systems: a randomized controlled trial. *Obstet Gynecol*. 2013 Dec;122(6):1205-1213.

Gemzell-Danielsson K, *et al*. Evaluation of a new, low-dose levonorgestrel intrauterine contraceptive system over 5 years of use. *Eur J Obstet Gynecol Reprod Biol*. 2017;210:22-28.

Kyleena

- Placement “easy” in 90% of women
- 99.5% successful placement
- 22.6% amenorrhoea rate at 5 years
- Lighter, shorter and less frequent periods
- 99% of women very / somewhat satisfied at 5 years
- 4/5 would continue after 5 years

Gemzell-Danielsson K, *et al*. A randomized, phase II study describing the efficacy, bleeding profile, and safety of two low-dose levonorgestrel-releasing intrauterine contraceptive systems. *Fertil Steril*. 2012 Mar;97(3):616-622.

Nelson A, *et al*. Two low-dose levonorgestrel intrauterine contraceptive systems: a randomized controlled trial. *Obstet Gynecol*. 2013 Dec;122(6):1205-1213.

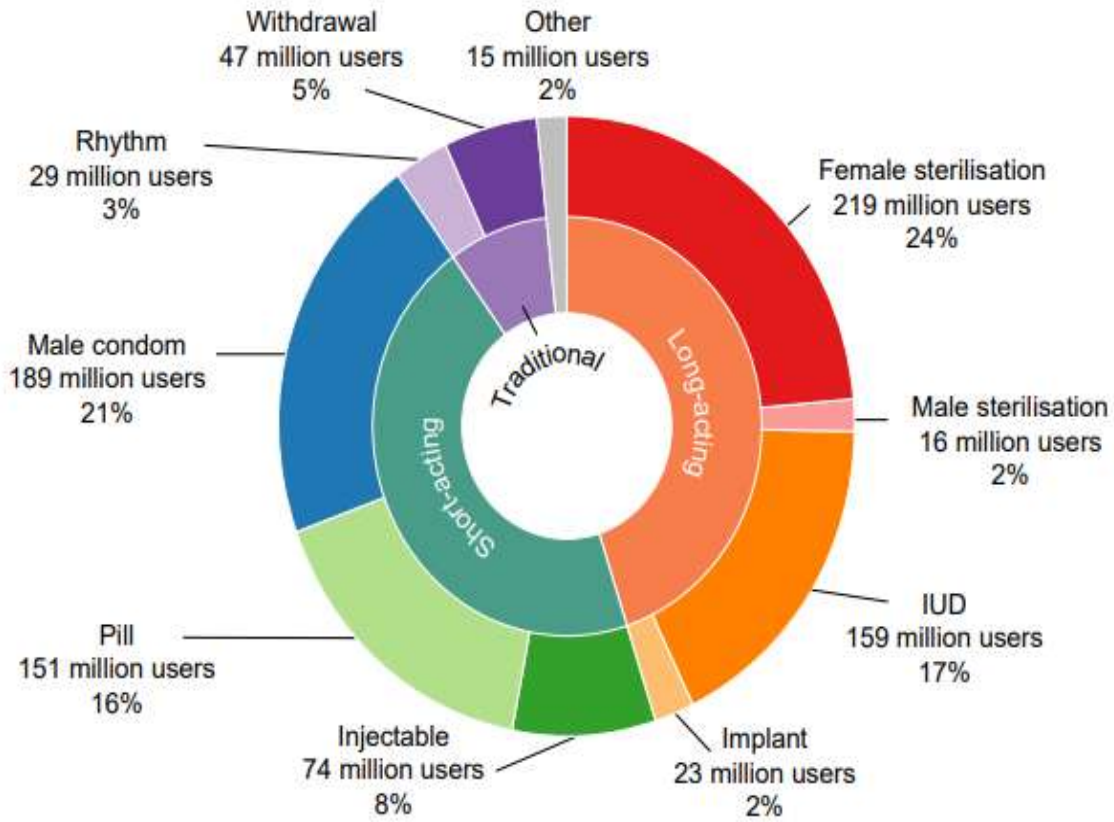
Gemzell-Danielsson K, *et al*. Evaluation of a new, low-dose levonorgestrel intrauterine contraceptive system over 5 years of use. *Eur J Obstet Gynecol Reprod Biol*. 2017;210:22-28.

	KYLEENA™[1]	MIRENA®[2]
Indication	Contraception for up to 5 years	Contraception for up to 5 years Treatment of idiopathic menorrhagia Endometrial protection during estrogen replacement therapy
Pearl Index (efficacy)	Year 1: 0.16 5-years: 0.29*	0.2 on the first year of use
Total levonorgestrel (LNG) content	19.5 mg	52.0 mg
Average in vivo LNG release rate over the first year of use	12 µg/24 hours[5]	20 µg/24 hours
Changes in menstrual bleeding pattern after insertion at the end of Year 1	Amenorrhea: 12% Infrequent bleeding: 26%	Amenorrhea: 16% Infrequent bleeding: 57%
T-Frame size[4,7]	28 mm x 30 mm	32 mm x 32 mm
Placement tube diameter size[7]	3.8 mm	4.4 mm
Colour of monofilament thread[7]	Blue	Brown
Insertion ease (easy/difficult)	93.5/0.8	86.2/1.6
Acceptor pain (nil/mild/mod/severe)	27/24/24/4	17/41/35/7

* The failure rate was approximately 0,2% at 1 year and the cumulative failure rate was approximately 1,5% at 5 years. The failure rate also includes pregnancies due to undetected expulsion and uterine perforation.

1. Kyleena™ Package Insert South Africa, 2017. **2.** Mirena® Package Insert South Africa, 2009. **3.** Trussel J. *Contraception* 2011;83:397-404. **4.** Gemzell-Danielsson K. PLoS ONE 2015 DOI:10.1371/journal.pone.0135309. **5.** Gemzell-Danielsson K, *et al. Eur J Obstet Gynecol Reprod Biol* 2017;210:22-28. **6.** Mirena® CCDS. Version 18. dated 11th Feb 2014. **7.** Differentiation of Kyleena™ and Mirena®

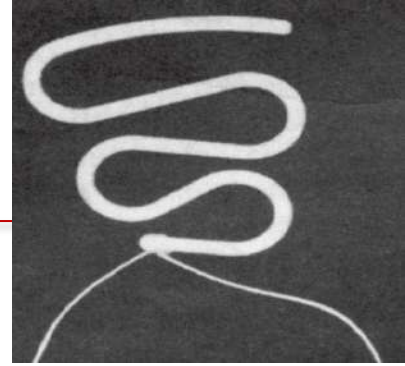
Estimated numbers of women of reproductive age (15-49 years) using various contraceptive methods, worldwide, 2019 n=922million



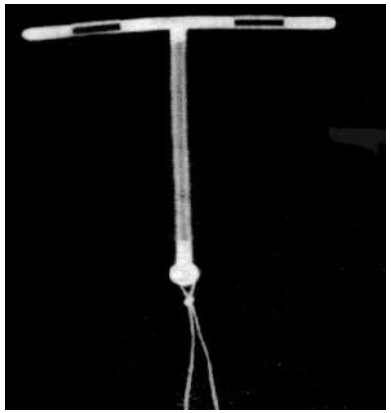
Data source: Calculations are based on the data compilation *World Contraceptive Use 2019*, additional tabulations derived from microdata sets and survey reports and estimates of contraceptive prevalence for 2019 from *Estimates and Projections of Family Planning Indicators 2019*. Population-weighted aggregates.

United Nations, Department of Economic and Social Affairs, Population Division (2019). Contraceptive Use by Method 2019: Data Booklet (ST/ESA/SER.A/435).

Types

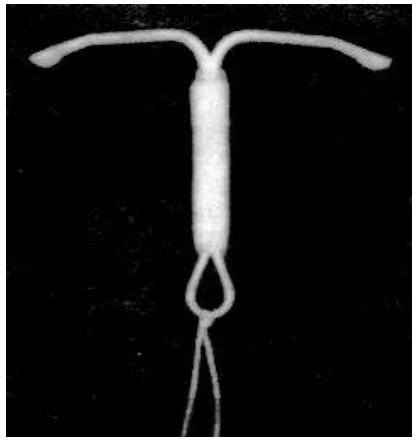


- 1st generation - Lippes loop
  - 1962



- 2nd generation - Copper T
  - Multiload
  - Nova T
  - IUB

- 3rd generation – Mirena
- 4th generation – Gynaefix



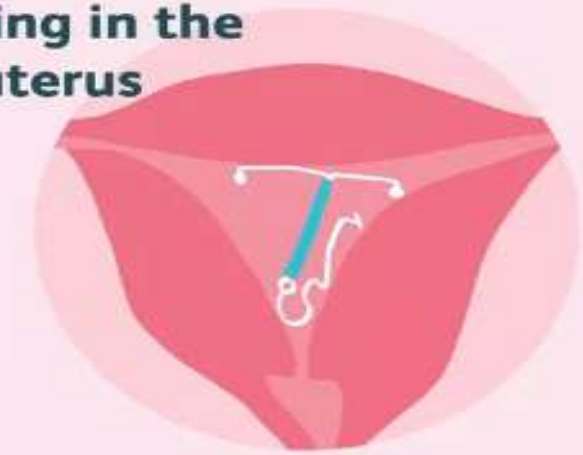
Disadvantages/ Complications

- Transient AUB & dysmenorrhoea (Cu IUD)
- No protection against STI & HIV
- Requires skilled provider
- Expulsion – 2-8%
- Perforation – rare 0.1%
- Not accessible
- Requires regular self examination
- Pain on insertion & vaso-vagal symptoms
- Leucorrhoea
- Missing strings

Why Can't I Feel My IUD Strings?

The IUD has come out of the uterus

Enlargement or swelling in the uterus



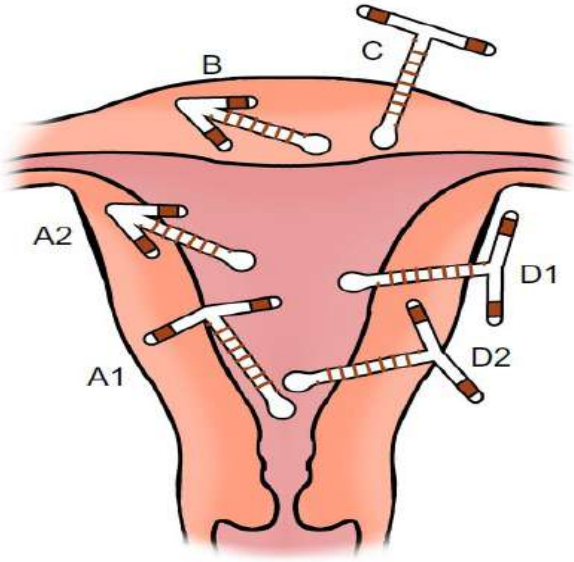
The IUD rotated during insertion

The IUD has been pushed through the uterus wall

The strings have become coiled and bent within the endocervical canal, or broken

Prevention of perforation and ensuring fundal placement

- Counselling, information and consent
- Skilled insertion training for clinicians
- Insertion by experienced clinicians
- Assessing the size and shape of uterus
- Placement of the flange correctly
- Traction with tenaculum
- Plastic vs metal sound
- A pull-back vs push-in technique
- Post insertion U/S and follow up



Patient Selection

- Hypertension
- History of stroke
- Smoker
- Obese
- Breastfeeding
- Breast cancer
- Varicose veins
- Blood clotting problem
- Epilepsy
- Liver or gallbladder disease
- Diabetes
- Non pelvic tuberculosis
- HIV infected
- AIDS (clinically well on ARV therapy)

Contraindications

Absolute

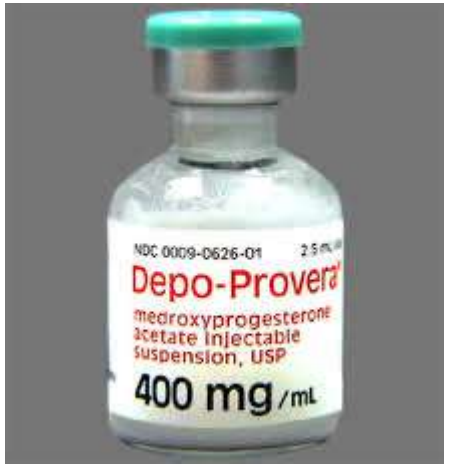
- Pregnancy
- Genital malignancy
- Acute PID, STIs
- Pelvic TB
- AIDS
- Congenital anomalies of the uterus
- Undiagnosed AUB

Relative

- Complicated Heart disease
- Leukaemia
- High risk of STIs
- Fibroids

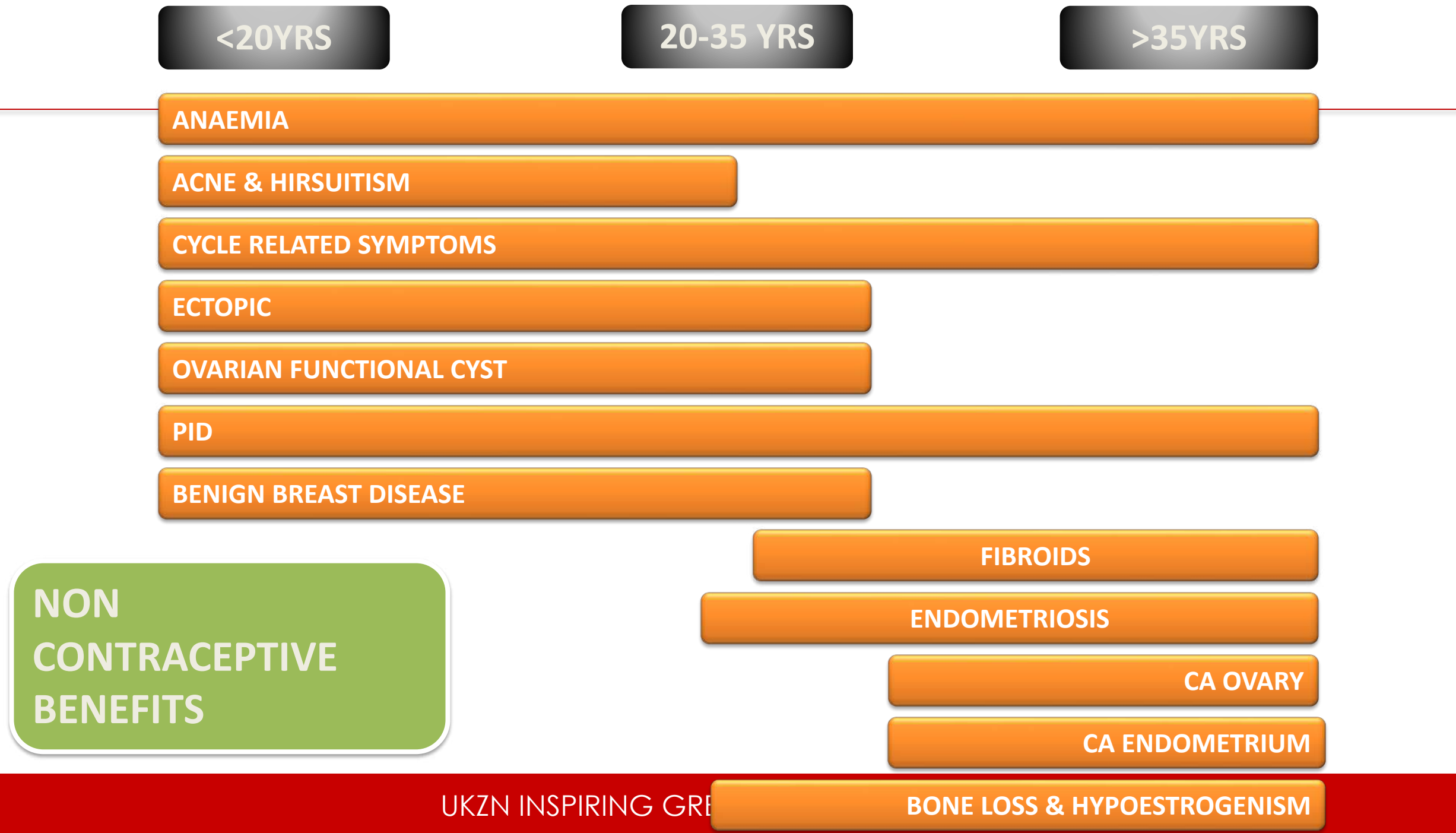
Injectable

- 12-15 weekly, IMI or Scut (self injection)
- Confidentiality
- Compliance may be better than OCP
- Irregular bleed
- BMD – reversible , Ca & Vit D suppl.
- Weight issues
- Less drug interactions



Combined Hormonal Contraception

- Common method chosen OCP
- Adherence – correct & consistent use,
- Counsel – missed pill, link pill time with daily routine
- Erratic use due to irregular sexual relationships
- Non contraceptive benefits
- Extended cycle regimens, short PFI
- Interesting novel methods - patch or ring
- Extended prescription


<20YRS
20-35 YRS
>35YRS
ANAEMIA
ACNE & HIRSUITISM
CYCLE RELATED SYMPTOMS
ECTOPIC
OVARIAN FUNCTIONAL CYST
PID
BENIGN BREAST DISEASE
FIBROIDS
ENDOMETRIOSIS
CA OVARY
CA ENDOMETRIUM
BONE LOSS & HYPOESTROGENISM
NON CONTRACEPTIVE BENEFITS

Name	Estrogen	Progestogen
Triphasil	30/40/30 EE	50/75/125 LNG
Nordette	30 EE	150 LNG
Ovral	**50 EE**	**500 norgestrel**
Minulette/Femodene	30 EE	75 gestodene
Tri-minulette	30 EE	30/40/30 gestodene
Melodene	20 EE	75 gestodene
Minesse/Mirelle	15 EE	60 gestodene
Marvelon	30 EE	150 desogestrel
Mercilon	20 EE	150 desogestrel
Cilest	35 EE	250 norgestimate
Diane/Ginette/Minerva	35 EE	**2mg cyproterone acetate**
Yasmin	30 EE	**3mg drospironone**
Yaz	20 EE	**3mg drospironone**
Qlaira	**3/2/1mg E2**	2/3mg dienogest
Zoely	**1,5mg E2**	2,5 nomegestrol

TRANSDERMAL PATCH

- EVRA / ORTHO EVRA
  20 ug EE/ 150ug Norelgestromin (active metabolite of Norgestimate)
- Size 4.5 x 4.5 cm
- Applied once each week for 3 consecutive weeks
- Followed by one week patch free for withdrawal bleed
- Can be placed on the buttocks, abdomen, upper torso (front and back, excluding breasts) or upper outer arm

Product package insert

NUVARING

- Soft, transparent & flexible vaginal ring
- 15 ug ethinylestradiol
  120 ug etonogestrel / day
- 3 weeks continuous use, 1 week ring free period
- Insert the ring squatting, supine or standing with one leg raised
- Exact positioning in the vagina is not critical for effectiveness
- Advantages similar to patch

Product package insert

Emergency Contraception

- Important part of method mix – variety available
- All adolescents should be made aware of it at every visit
- Sex can be sporadic, unplanned, nonconsensual, condom accidents
- Should not be relied on multiple times
- Not freely available
- Advance provision

1. Ellertson C et al Emergency contraception: randomized comparison of advance provision and information only. Obstet Gynecol. 2001;98 (4):570–575 144.
2. Meyer JL, Gold MA, Haggerty CL. Advance provision of emergency contraception PEDIATRICS Volume 134, Number 4, October 2014 e1255
3. American Academy of Pediatrics EC use among adolescent and young adult women: a systematic review of literature. J Pediatr Adolesc Gynecol. 2011;24(1):2–9
4. ACOG 2017 Counselling adolescents about contraception

Types

- IUCD
- POP
  - 750ug LNG in 2 doses 12hrs apart
  - 1.5mg LNG single dose
  - Eg. Escapelle
- Ulipristal Acetate Eg. Ella one
- Yuzpe regimen (COC)
  - 100ug EE & 500ug LNG in 2 doses 12hrs apart
  - May cause nausea & vomiting
  - Eg. E-Gen-C
- Mifepristone

Barrier methods

- Most common method used by adolescents
- Includes condoms & diaphragm
- Means to prevent HIV and STIs
- Ideal for sporadic sexual activity
- Encourages male involvement
- Must encourage dual contraception - 4% among 15 -16-year-old females to 12 - 31% among women age 21 years[1,2]

1. Pettifor AE et al Young people's sexual health in South Africa: HIV prevalence and sexual behaviors from a nationally representative household survey, AIDS: September 23, 2005 - Volume 19 - Issue 14 - p 1525-1534 doi: 10.1097/01.aids.0000183129.16830.06
2. Mchunu G et al, Adolescent pregnancy and associated factors in South African youth African Health Sciences 2012; (4): 426 – 434 http://dx.doi.org/10.4314/ahs.v12i4.5

Abstinence

- Might have very occasional penile-vaginal sex therefore still need to know about barrier & EC
- Supporting skills – how to say NO!

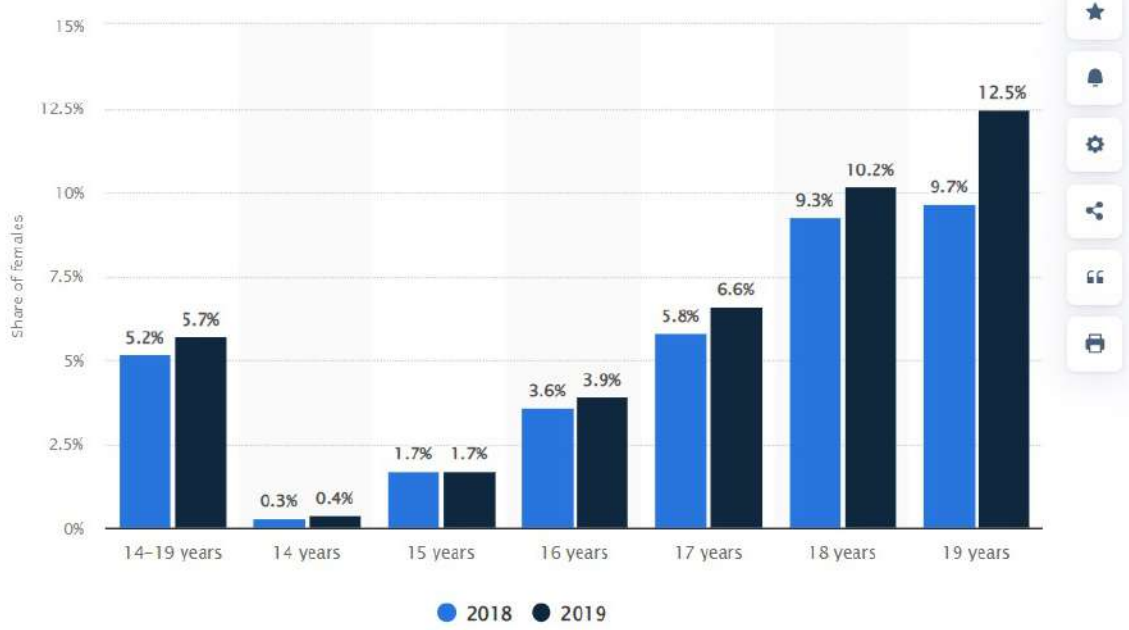
Conclusion

- They will be us
- Right to SRH and sexuality **education**
- Teenage pregnancy is preventable
- Barriers
- Policy into practice
- HCP wake up and smell the coffee
- Respect, **confidentiality** and quality **service**
- Promote LARCs – proven impact
- Social media

Guzzo KB et al.2018 Adolescent Reproductive and Contraceptive Knowledge and Attitudes and Adult Contraceptive Behavior. Maternal and Child Health Journal (22), 32–40

UKZN INSPIRING GREATNESS

Share of females aged 14-19 years who were pregnant in South Africa in 2018 and 2019, by age



Additional Information

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Source

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Release date

December 2020

Region

South Africa

Survey time period

2019

Age group

14-19 years

Supplementary notes

The source mentions that the questionnaire used enquired whether any females between the ages of