Child Development OCR Knowledge Organiser LO1

THEMES

Factors affecting preconception

Relationship between partners – have the couple been together for long enough to form a happy, stable and caring relationship based on love and trust.
Finance – Raising a child is expensive, this includes equipment, feeding, and childcare.
Age – as the mother ages her ability to conceive declines. Younger parents may be healthier and fitter, but older parents may be more mature, relaxed and financially secure.
Peer pressure/social expectations – Friends having babies, and social expectation from friends and family can add pressure.
Genetic counselling – Parents at risk of having a child with a genetic disorder will be offered tests to check. Some can only be passed on by the mother, and some by the father. E.G – cystic fibrosis.

Pre-conception Health

Addressing health concerns before trying for a baby, gives the child the healthiest start possible.

Diet – A healthy well-balanced diet as the baby relies on the mother for all the nutrients to grow and develop.
Exercise – Being fit and healthy helps the body cope with pregnancy and birth.
Healthy weight – being overweight or underweight can affect ovulation and fertility, and lead to health issues in pregnancy.
Dangers of smoking/alcohol/recreational drugs – impacts the baby's growth and development, risk of premature birth, miscarriage, stillbirth and foetal abnormalities, affect the nutrients received via the placenta.
Up to date immunisations – Contribute to a woman's health before and during pregnancy and has benefits to the baby.
Folic Acid – Reasons to take the supplement before pregnancy

Stages of reproduction

Ovulation – when the egg is released from one of the ovaries and travels along the fallopian tube around day 14 of the menstrual cycle.
Conception/fertilisation – occurs when the sperm penetrates the egg and fuse together as one cell and continues along the fallopian tubes.
Implantation – around 7 days later the fertilised egg reaches the uterus and implants itself in the enriched lining. The egg is now an embryo.
Identical twins - are the result of one fertilised egg dividing into two cells.
Non-identical twins - are the result of two separate eggs being released and fertilised by two different sperm.

Methods of contraception

Barrier methods – device or preparation prevents the sperm reaching the egg.
Male condom – put onto erect penis before it comes into contact with vagina. 98% effective if used correctly. Also helps protect against STI's. widely available. Can come off or split if not used correctly.
Female condom – Put inside vagina before it comes into contact with the penis. 95% effective if used correctly. Also helps protect against STI's. widely available. Can be pushed too far and is more expensive than male condoms.
Diaphragm or cap – dome shaped latex that covers the cervix, inserted before sex (can be done a few hours before) with spermicidal gel. Reusable. 92% effective if used correctly. Also helps protect against STI's. Can experience difficulty in learning to use them and can cause cystitis.

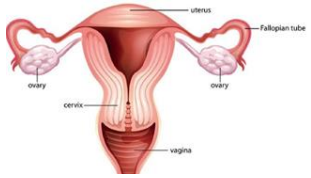
Hormonal methods – hormones prevent eggs being released from the ovaries, thicken cervical mucus to prevent sperm entering and thin the lining of the uterus to prevent implantation.
Contraceptive pill (combined pill) – pill taken for 21 days, followed by 7-day break within which the woman has a period. Needs to be taken at the same time of day. 99% effective if used correctly. Side effects can include weight gain and mood swings.
Contraceptive pill (progestogen-only pill) – pill taken every day. 99% effective if used correctly. Side effects can include spot prone skin, irregular periods and tender breasts.

Intrauterine device/system (IUD or IUS) – small t shaped plastic device inserted into the uterus. 99% effective for five years or three years. Does not protect against STI's, insertion can be uncomfortable. But can make periods lighter/shorter/stop and be used by women who cannot take the combined pill.
Contraceptive injection – Injected every few weeks (often 12). 99% effective. Side effects can include weight gain, headaches and irregular periods and after stopping can take a year for fertility levels to return to normal.
Contraceptive patch – worn on the skin. 99% effective. Patch must be changed each week for three weeks, then there is a week off. Side effects can include headaches and raised blood pressure.
Contraceptive implant – small flexible tube inserted into upper arm. 99% effective for three years. Does not protect against STI's and some medicines can make it ineffective.
Emergency contraceptive pill – Prevents pregnancy after unprotected sex or if contraception has failed. Must be taken within 72 hours, if taken within 24 hours it is 98% effective, after 72 hours it is 52% effective. It is free of charge.

Natural family planning
Temperature method
Cervical mucus method
Calendar method
A woman records the symptoms in her body (temperature and vaginal secretions) to indicate when she is fertile and able to conceive (around 8 days in each month) on fertile days a condom can be used, or the couple can abstain from sex. 98% effective if done correctly.

Reproductive system

Female reproductive system
Ovaries (2) – produces eggs and hormones
Fallopian tubes - cilia in the lining of the tube waft the egg from the ovary to the uterus
Uterus - muscular wall protects the foetus, lining enables exchange of materials
Cervix - neck of the uterus, dilates during labour
Vagina - receives sperm and baby leaves here.



Male Reproductive System

Urethra - tube in penis which carries the semen

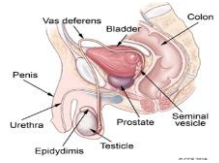
Testes - produces sperm and hormones

Sperm duct or epididymis - carries sperm from testes to urethra

Penis – transfers semen (sperm plus seminal fluid) from male to female

Seminal vesicle - The **seminal vesicles** are a pair of glands found in the male pelvis, which function to produce many of the constituent ingredients of **semen**.

Vas deferens - the **vas deferens** is responsible for directing and propelling sperm into the urethra, after the sperm has passed through the epididymis.



Signs/ symptoms of pregnancy

Breast changes – becoming larger and tender

Missed period – Often the first sign of pregnancy

Nausea – Feeling sick/and or vomiting

Passing urine frequently

Tiredness

Menstrual cycle

Menstrual cycle

28-day cycle when women have their periods.

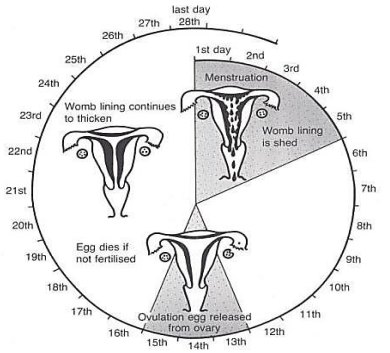
During menstruation blood flows from the uterus and leaves the body via the vagina.

A new egg them develops in one of the ovaries.

About 14 days after the first day of menstruation, the egg is released from the ovary and travels along the fallopian tube to the uterus.

The lining of the uterus will be thickened ready to receive an egg fertilized by sperm. If this occurs the egg implants in the lining and the baby will start to grow.

If implantation does not occur by the end of the menstrual cycle, the blood, lining and egg are flushed out via another period and the cycle begins again.



A typical 28 day menstrual cycle