

Course Name	: Reproductive Health Issues
Course Code	: APBPH 2104
Course Level	: Level 3
Credit Unit	: 4 CU
Contact Hours	: 60 Hrs

Course Description

The Course introduces complex definitions of reproductive health, differentiating maternal health and reproductive health, critical understanding of health related SDGs. It further involves human rights related to constellation of reproductive rights, the lifecycle approach of reproductive health, conceptualization of family planning & its methods, family planning versus birth control, stages of pregnancy, physiological changes of pregnancy, breast feeding, pre-conception counseling, infertility, maternal health, and continuous debates on abortion.

Course Objectives

- To help students learn complex issues related to reproductive health.
- To provide them with practical skills of assessing the achievement of health related MDGs in their own country.
- To further introduce students to critical thinking about how best reproductive health rights especially for women can be raised.
- To strengthen the capacity of practitioners of public health to discover more knowledge in reproductive health and thus disseminate it to the public for health improvements for populations at risk.

Course Content

Introduction

- Definition of Reproductive Health
- What is sexual Health
- Child bearing and Health
- Health related MDGs
- Violence against Women

Human Rights

- Supporting the constellation of Reproductive Rights
- What are reproductive rights
- Reproductive rights and international development goals

The life cycle approach of reproductive health

- Critical messages for different life stages
- Reproductive and sexual health is a social concern
- Stepping up efforts to save mothers' lives
- Female reproductive health risk factors

Family Planning

- Meaning of Family Planning
- Differentiation between Family and Birth Control
- Overview: Types of Birth Control
- Brief description of different methods of Family planning methods

- Benefits of Family planning

Birth Control

- Meaning of Birth Control
- Methods of birth control
- Methods in development; For females and for males
- Modern misconceptions against birth control
- Birth control education

Stages of Pregnancy

- Initiation
- Perinatal period
- Postnatal period
- Child birth
- Diagnosis
- Prenatal development and sonograph images

Physiological changes in Pregnancy

- Hormonal changes
- Musculoskeletal changes
- Physical changes
- Cardiovascular changes
- Respiratory changes
- Metabolic changes
- Weight gains

Breast Feeding

- Meaning of breast feeding
- Benefits of breast feeding for the infant
- Benefits for the mothers
- Breastfeeding difficulties
- Types of breastfeeding
- History of breastfeeding
- Breastfeeding in public

Pre-conception Counseling

- Meaning of pre-conception counseling
- Obstacles of pre-conception counseling
- What is involved in pre-conception counseling

Infertility

- Definition of infertility
- Primary Vs Secondary infertility
- Prevalence of infertility
- Causes of infertility
- Different approaches to infertility treatment

Maternal Health

- Meaning of Maternal Health
- Problems affecting Maternal Health in developing countries
- Proposed solutions

Abortion

- Definition of abortion

- Types of abortion
- Abortion methods
- Health consideration
- Incidence of induced abortion.

Mode of delivery Face to face lectures

Assessment

Coursework 40%

Exams 60%

Total Mark 100%

REPRODUCTIVE HEALTH ISSUES

- Definitions of reproductive health
- Sexual health
- Childbearing and health
- Reproductive health and abortion
- Public Policy & Legislation
- Violence against Women
- Human and Reproductive Rights
- Critical messages for different life stages
- Stepping up Efforts to Save Mothers' Lives
- Female Reproductive Health Risk Factors
- Family planning
- Birth control

Introduction

In this module we are going to look at reproductive health where by we are basically going to focus on knowing what reproductive health and it's associated practices under which we will look at family planning, birth control, sexual health, child bearing health, Maternal mortality and infant Mortality, Public policy and legislation of reproductive health, violence against women, Reproductive rights and Sexual Concerns

Course Analysis

By the end of the module one should be in position to answer questions and attempt the course work question below

Reproductive health is a relevant aspect of development in modern societies today, with relevant examples and proper explanations, explain the benefits of reproductive health to the citizens and government of a developing country like yours.

According to The World Health Organisation (WHO), Reproductive health is defined as a state of physical, mental, and social well-being in all matters relating to the reproductive system at all stages of life. Reproductive health implies that people are able to have a satisfying and safe sex life and that they

have the capability to reproduce and the freedom to decide if, when, and how often to do so. Implicit in this are the right of men and women to be informed and to have access to safe, effective, affordable, and acceptable methods of family planning of their choice, and the right to appropriate health-care services that enable women to safely go through pregnancy and childbirth.

Reproductive health care is defined as the constellation of methods, techniques, and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems. It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counselling and care related to reproduction and sexually transmitted infections.

In support of this aim, WHO's reproductive health program has developed four broad programmatic goals:

- * Experience healthy sexual development and maturation and have the capacity for equitable and responsible relationships and sexual fulfilment;
- * Achieve their desired number of children safely and healthily, when and if they decide to have them;
- * Avoid illness, disease, and disability related to sexuality and reproduction and receive appropriate care when needed;
- * Be free from violence and other harmful practices related to sexuality and reproduction.

Sexual health

An unofficial working definition for sexual health is that "Sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled." However, this is not an official WHO position, and should not be used or quoted as a WHO definition.

Childbearing and health

Early childbearing and other behaviours can have health risks for women and their infants. Waiting until a woman is at least 18 years old before trying to have children improves maternal and child health. If an additional child is desired, it is considered healthier for mother, as well as for the succeeding child, to wait at least 2 years after previous birth before attempting to conceive. After a miscarriage or abortion, it is healthier to wait at least 6 months.

The WHO estimates that each year, 358 000 women die due to complications related to pregnancy and childbirth; 99% of these deaths occur within the most disadvantaged population groups living in the poorest countries of the world. Most of these deaths can be avoided with improving women's access to quality

care from a skilled birth attendant before, during and after pregnancy and childbearing

International Conference on Population and Development (ICPD), 1994 The International Conference on Population and Development (ICPD) was held in Cairo, Egypt, from 5 to 13 September 1994. Delegations from 179 States took part in negotiations to finalize a Programme of Action on population and development for the next 20 years. Some 20,000 delegates from various governments, UN agencies, NGOs, and the media gathered for a discussion of a variety of population issues, including immigration, infant mortality, birth control, family planning, and the education of women.

In the ICPD Program of Action, 'Reproductive health' is defined as:

“a state of complete physical, mental and social well-being and...not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed [about] and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of birth control which are not against the law, and the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.”

This definition of the term is also echoed in the United Nations Fourth World Conference on Women, or the so-called Beijing Declaration of 1995. However, the ICPD Program of Action, even though it received the support of a large majority of UN Member States, does not enjoy the status of an international legal instrument; it is therefore not legally binding.

The Program of Action endorses a new strategy which emphasizes the numerous linkages between population and development and focuses on meeting the needs of individual women and men rather than on achieving demographic targets The ICPD achieved consensus on four qualitative and quantitative goals for the international community, the final two of which have particular relevance for reproductive health:

- Reduction of maternal mortality: A reduction of maternal mortality rates and a narrowing of disparities in maternal mortality within countries and between geographical regions, socio-economic and ethnic groups.
- Access to reproductive and sexual health services including family planning: Family planning counselling, pre-natal care, safe delivery and post-natal care, prevention and appropriate treatment of infertility, prevention of abortion and the management of the consequences of abortion, treatment of reproductive tract infections, sexually transmitted diseases and other reproductive health

conditions; and education, counselling, as appropriate, on human sexuality, reproductive health and responsible parenthood. Services regarding HIV/AIDS, breast cancer, infertility, delivery, hormone therapy, sex reassignment therapy, and abortion should be made available. Active discouragement of female genital mutilation (FGM).

Key to this new approach is empowering women and providing them with more choices through expanded access to education and health services and promoting skill development and employment. The Programme advocates making family planning universally available by 2015, or sooner, as part of a broadened approach to reproductive health and rights, provides estimates of the levels of national resources and international assistance that will be required, and calls on Governments to make these resources available.

Millennium Development Goals

Achieving universal access to reproductive health by 2015 is one of the two targets of Goal 5 - Improving Maternal Health - of the eight Millennium Development Goals. To monitor global progress towards the achievement of this target, the United Nations has agreed on the following indicators: 4

- 5.3: contraceptive prevalence rate
- 5.4: adolescent birth rate
- 5.5: antenatal care coverage
- 5.6: unmet need for family planning

According to the MDG Progress Report, regional statistics on all four indicators have either improved or remained stable between the years 2000 and 2005. However, progress has been slow in most developing countries, particularly in Sub-Saharan Africa, which remains the region with the poorest indicators for reproductive health. According to the WHO in 2005 an estimated 55% of women do not have sufficient antenatal care and 24% have no access to family planning services Uganda inclusive

Violence against Women

Living with dignity includes freedom from physical and emotional violence and the fear of such violence in the home, workplace, church, and community. For this reason, the Unitarian Universalist Association calls for the end of violence against women and the spiritual, emotional, and physical damage that accompanies it. Join us as we do this important work.

Human Rights

Supporting the Constellation of Reproductive Rights

During the 1990s, a series of important United Nations conferences emphasized that the well-being of individuals, and respect for their human rights, should be central to all development strategies. Particular emphasis was given to reproductive rights as a cornerstone of development.

Reproductive rights were clarified and endorsed internationally in the Cairo Consensus that emerged from the 1994 International Conference on Population and Development. This constellation of rights, embracing fundamental human rights established by earlier treaties, was reaffirmed at the Beijing Conference and various international and regional agreements since, as well as in many national laws. They include the right to decide the number, timing and spacing of children, the right to voluntarily marry and establish a family, and the right to the highest attainable standard of health, among others.

What are reproductive rights?

Attaining the goals of sustainable, equitable development requires that individuals are able to exercise control over their sexual and reproductive lives. This includes the rights to:

- Reproductive health as a component of overall health, throughout the life cycle, for both men and women
- Reproductive decision-making, including voluntary choice in marriage, family formation and determination of the number, timing and spacing of one's children and the right to have access to the information and means needed to exercise voluntary choice
- Equality and equity for men and women, to enable individuals to make free and informed choices in all spheres of life, free from discrimination based on gender
- Sexual and reproductive security, including freedom from sexual violence and coercion, and the right to privacy.

Reproductive rights and international development goals

The importance of reproductive rights in terms of meeting international development goals has increasingly been recognized by the international community. In the September 2005 World Summit, the goal of universal access to reproductive health was endorsed at the highest level. Reproductive rights are recognized as valuable ends in themselves, and essential to the enjoyment of other fundamental rights. Special emphasis has been given to the reproductive rights of women and adolescent girls, and to the importance of sex education and reproductive health programmes.

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Reproductive Health

The Life Cycle Approach

Reproductive health is a lifetime concern for both women and men, from infancy to old age. UNFPA supports programming tailored to the different challenges they face at different times in life.

In many cultures, the discrimination against girls and women that begins in infancy can determine the trajectory of their lives. The important issues of education and appropriate health care arise in childhood and adolescence. These continue to be issues in the reproductive years, along with family planning, sexually transmitted diseases and reproductive tract infections, adequate nutrition and care in pregnancy, and the social status of women and concerns about cervical and breast cancer.

Male attitudes towards gender and sexual relations arise in boyhood, when they are often set for life. Men need early socialization in concepts of sexual responsibility and ongoing education and support in order to experience full partnership in satisfying sexual relationships and family life.

Critical messages for different life stages

In its advocacy and programming, UNFPA has focused on key messages that can empower both women and men at different stages of their lives.

Girls and boys

- Inform and empower girls to delay pregnancy until they are physically and emotionally mature.

Inspire and motivate boys and men to be sexually responsible partners and value daughters equally as sons.

Encourage governments to take responsibility for the human catastrophe of orphans and other children who live in the streets.

Adolescents

Reorient health education and services to meet the diverse needs of adolescents. Integrated reproductive health education and services for young people should include family planning information, and counselling on gender relations, STDs and HIV/AIDS, sexual abuse and reproductive health.

Ensure that health care programmes and providers' attitudes allow for adolescents' access to the services and information they need.

Support efforts to eradicate female genital cutting and other harmful practices, including early or forced marriage, sexual abuse, and trafficking of adolescents for forced labour, marriage or commercial sex.

Socialize and motivate boys and young men to show respect and responsibility in sexual relations.

Adulthood

Improve communication between men and women on issues of sexuality and reproductive health, and the understanding of their joint responsibilities, so that they are equal partners in public and private life.

Enable women to exercise their right to control their own fertility and their right to make decisions concerning reproduction, free of coercion, discrimination and violence.

Improve the quality and availability of reproductive health services and barriers to access.

Make emergency obstetric care available to all women who experience complications in their pregnancies.

Encourage men's responsibility for sexual and reproductive behaviour and increase male participation in family planning.

The older years

- Reorient and strengthen health care services to better meet the needs of older women.
- Support outreach by women's NGOs to help older women in the community to better understand the importance of girls' education, reproductive rights and sexual health so that they may become effective transmitters of this knowledge.
- Develop strategies to better meet needs of the elderly for food, water, shelter, social and legal services and health care.

Reproductive and sexual health is a societal concern

Reproductive and sexual health is a societal issue — not only the responsibility of the health sector. It is important to build partnerships with other public and private sectors, as well as with civil society.

Effective health service delivery can be achieved by:

- Partnerships with civil society
- Community involvement
- Integration of services
- Inclusion of health promotion activities
- Advocacy for sexual and reproductive health and rights
- Coordination across services, sectors, ministries

Communities can play an important role in building demand for appropriate reproductive health services. For instance, they can mobilize and build awareness at the local level about reproductive health issues. They can organize to pool resources in micro-insurance schemes. They can collectively exert more pressure for public health service improvements than individuals. Such efforts can be especially effective and timely as health reform and decentralization is underway in many countries. Innovative and participatory approaches are needed to ensure that reproductive health issues receive adequate attention during this transition. The UNFPA-supported Stronger Voices project is a good example

What can be defined as a reproductive health package is a system that occupies all the networks and stake holders involved within reproduction. A full sexual and reproductive health package includes:

- Family planning/birth spacing services
- Antenatal care, skilled attendance at delivery, and postnatal care

- Management of obstetric and neonatal complications and emergencies
- Prevention of abortion and management of complications resulting from unsafe abortion
- Prevention and treatment of reproductive tract infections and sexually transmitted infections including HIV/AIDS
- Early diagnosis and treatment for breast and cervical cancer
- Promotion, education and support for exclusive breast feeding
- Prevention and appropriate treatment of sub-fertility and infertility
- Active discouragement of harmful practices such as female genital cutting
- Adolescent sexual and reproductive health
- Prevention and management of gender-based violence

Stepping up Efforts to Save Mothers' Lives

Every day, almost 1,000 women die in pregnancy or childbirth. Every ninety seconds, the loss of a mother shatters a family and threatens the well-being of surviving children. Evidence shows that infants whose mothers die are more likely to die before reaching their second birthday than infants whose mothers survive. And for every woman who dies, 20 or more experience serious complications.

Of the hundreds of thousands of women who die during pregnancy or childbirth each year, 90 per cent live in Africa and Asia. The majority of women are dying from severe bleeding, infections, eclampsia, obstructed labour and the consequences of unsafe abortions--all causes for which we have highly effective interventions.

Working for the survival of mothers is a human rights imperative. It also has enormous socio-economic ramifications – and is a crucial international development priority. Both the International Conference on Population and Development and Millennium Development Goals call for a 75 per cent reduction in maternal mortality between 1990 and 2015. This three-pronged strategy is key to the accomplishment of the goal:

- All women have access to contraception to avoid unintended pregnancies
- All pregnant women have access to skilled care at the time of birth
- All those with complications have timely access to quality emergency obstetric care

In 2008, UNFPA established the Maternal Health Thematic Fund to increase the capacity of national health systems to provide a broad range of quality maternal health services, reduce health inequities, and empower women to exercise their right to maternal health. The Campaign to End Fistula and the UNFPA-ICM Midwifery Programme are now integrated into this umbrella fund.

UNFPA has also teamed up with four partners, UNICEF, the World Bank, World Health Organization and UNAIDS, to accelerate progress in saving the lives of women and newborns. Collectively known as the 'The Health 4+' or 'H4+', the five agencies have pledged to support countries with the highest maternal mortality rates.

The H4+ joined the Every Woman Every Child effort in 2010 to support to the Global Strategy for Women's and Children's Health. The agencies have helped countries to make commitments to this global initiative, and with the UN's MDG Advocates and partners, are supporting a group of countries—that together accounts for almost 60 per cent of global maternal deaths—to mobilize the financial, technical and human resources needed to meet their commitments.

Female Reproductive Health Risk Factors Participating in these activities can impact your female reproductive health: Smoking Alcohol and Drugs Toxins Sexual History Smoking Smoking can have a serious impact on your female reproductive health by interfering with your body's ability to create oestrogen and thereby regulate ovulation. It can also cause your eggs to be more prone to genetic abnormalities, is associated with an increased risk of miscarriage, and has been linked to early onset of menopause. In addition to its impact on female reproductive health and fertility, smoking has been tied to increases in the likelihood of cervical cancer and pelvic infections. What to do? If you smoke, consider quitting. The impact of smoking is greater the longer you smoke and while not all of the female reproductive health damage is reversible, stopping now can prevent future damage. In addition to improving your female reproductive health, you can also improve other important aspects of your health, including heart and lung health. If you don't smoke, don't start

Alcohol and Drugs Moderation is the key with alcohol. In fact, many studies have shown that there is some benefit in the consumption of small amounts of alcohol for women. However, excessive consumption of alcohol and alcohol abuse can lead to female reproductive health problems including; irregular ovulation, amenorrhea (absence of menses), and the abnormal development of the endometrial lining. Illegal drugs, such as marijuana, heroin and cocaine, are universally damaging to female fertility and female reproductive health. Perhaps more difficult to manage are the risks that some legal and over-the-counter drugs may have on fertility and female reproductive health. For example, some prescription medications can interfere with ovulation. What to do? Don't use illegal drugs and moderate your alcohol consumption. Discuss

any prescription drugs that you are taking with your doctor to determine if any may pose a female reproductive health problem in the future. **Toxins** There is more information than ever available on the effects of “body burden”, or the build up of certain environmental toxins, such as pesticides, fertilizers and solvents, in our bodies, as well as its impact on female reproductive health. While the extent to which toxin exposure contributes to infertility is still somewhat unclear, it should be considered as a preventable cause of female reproductive health problems. Exposure to toxins has been linked to several female reproductive health problems such as, irregular periods, hormone changes, endometriosis and higher miscarriage rates in pregnant women. What to do? Try to limit your exposure to toxic materials as much as possible, particularly while trying to conceive. Take the proper precautions when using products containing or comprised of harmful toxins including the use of safety gloves, face masks and protective clothing to minimize direct exposure. **Sexual History** The best way to prevent female reproductive health problems related to sexual history is to practice safe sex – above and beyond preventing unwanted pregnancies. Many sexually transmitted infections (STDs) go untreated for long periods of time because the symptoms are sometimes not visible. This can pose a considerable threat to female reproductive health and future fertility. STDs, when left untreated, can lead to pelvic inflammatory disease, causing scarring or blocking of the fallopian tubes, and changes in the cervix.

Family planning is the planning of when to have children, and the use of birth control and other techniques to implement such plans. Other techniques commonly used include sexuality education, prevention and management of sexually transmitted infections pre-conception counselling and management, and infertility management.

Family planning is sometimes used in the wrong way also as a synonym for the use of birth control, though it often includes more. It is most usually applied to a female-male couple who wish to limit the number of children they have and/or to control the timing of pregnancy (also known as spacing children). Family planning may encompass sterilisation, as well as abortion.

Family planning services are defined as "educational, comprehensive medical or social activities which enable individuals, including minors, to determine freely the number and spacing of their children and to select the means by which this may be achieved."

Birth control

With assertions of overpopulation, there have been assertions that birth control is the answer. Birth control is techniques used to prevent unwanted pregnancy.

There are a range of contraceptive methods, each with unique advantages and disadvantages. Any of the widely recognized methods of birth control is much more effective than no method. Behavioral methods that include intercourse,

such as withdrawal and calendar based methods have little up front cost and are readily available, but are less effective in typical use than most other methods. Long-acting reversible contraceptive methods, such as IUD and implant are highly effective and convenient, requiring little user action. When cost of failure is included, IUDs and vasectomy are much less costly than other methods.

For families who want a sense of control over when to have children---a concept known as family planning---there are many options available, all differing slightly in price, effectiveness and comfort. Whatever method you choose, it's always a smart idea to talk to your doctor about your options and the pros and cons associated with each method.

Outer course

According to Planned Parenthood, "outer course" is defined as any sexual play that does not involve actual insertion of the penis into the vagina, thus preventing sperm from entering into the uterus. Outer course could include oral sex, stimulation by hand or body-to-body rubbing.

Types of Birth Control

Contraception is a term used for the prevention of pregnancy, and it is often referred to as birth control. There are several methods of contraception, some of which are created for women and others for men. Some methods are considered permanent while others are reversible. The majority of birth control methods fall into one of two categories: barrier or hormonal. There are also four other methods: sterilization (surgery), withdrawal, natural family planning and abstinence.

It is important to examine the different methods of birth control and other related considerations as you determine which method of contraception is best for you. It is important to remember that most birth control methods prevent pregnancy, but they do not prevent the transmission of sexually transmitted diseases. If you are sexually active and using a form of birth control, it is important to remember that all forms of birth control have a failure rate. You should take a pregnancy test if you are experiencing any pregnancy symptoms.

Below is a brief description of each type of contraception. Additional detailed information is available through links to each specific type of contraception.

Natural Family Planning

This method requires no drugs and allows the couple to enjoy normal sexual intercourse, but is more subject to error than other methods. With natural family planning, couples attempt to determine when the woman is ovulating, based on patterns with the menstrual cycle, and avoid having intercourse during those fertile times. Two common ways of determining ovulation are by examining the cervical mucus, which is clearer, slippery and more abundant when a woman is ovulating, and keeping track of the woman's basal body

temperature. During ovulation, a woman's basal temperature will rise about .9 degrees Fahrenheit, according to the American Academy of Family Physicians.

Abstinence

Abstinence is the act of avoiding sex, whether sexual contact altogether or just intercourse. This method of family planning is the only one that is 100 percent effective in preventing pregnancy and protecting against sexually transmitted diseases (STDs). Abstinence can be difficult to maintain and allows for little spontaneity. As a means of contraception, abstinence is the voluntary refraining from sexual activity.

- Abstinence is the only contraceptive method that is 100% effective in the prevention of both pregnancy and the transmission of sexually transmitted diseases.

Fertility Awareness Method: Natural Family Planning (NFP):

Also known as natural family planning, fertility awareness is the act of abstaining from intercourse on a woman's fertile days, when she is most likely to become pregnant. To follow this method, women need to accurately and precisely chart their fertility, either through basal body temperature changes or changes in cervical mucus, or by following the calendar.

- Fertility awareness method is also known as Natural Family Planning and it is commonly called NFP.

- NFP does not rely on devices or medications to prevent pregnancies.

- NFP is a contraceptive method that uses the natural functions of your body and your menstrual cycle to calculate ovulation. The most common features of NFP involve recording of your body temperature and changes in your cervical mucus each day.

- NFP requires periodic abstinence (approximately 7 to 10 days) during the ovulation period. Some women choose to use a barrier method or withdrawal during this time frame.

Birth Control Ring

The small, flexible birth control ring is placed in the vagina, where it releases a steady supply of progestin and oestrogen hormones. The ring stays in the vagina for 3 weeks, after which it is discarded. The ring is over 99 percent effective when used as prescribed. The ring may cause unwanted side effects such as nausea and weight gain.

Barrier Methods: Devices

Barrier or device methods of contraceptives are physical or chemical barriers designed to stop sperm from entering a woman's uterus.

Condoms

Condoms are thin latex coverings that form a barrier between sperm and the vagina. When used as indicated, condoms are 95 to 97 percent effective in preventing pregnancy and have the added bonus of protecting against STDs. Female and male varieties are available, and they come in a wide range of colours and styles.

Male Condom:

The male condom is a tube of thin material (latex rubber) that is rolled over the erect penis prior to contact with the vagina.

The male condom is the most common barrier method.

Female Condom:

The female condom is a seven-inch long pouch of polyurethane with two flexible rings and is inserted into the vagina prior to intercourse.

The female condom covers the cervix, vaginal canal, and the immediate area around the vagina.

Spermicide

Spermicides are creams, jellies or suppositories that stop sperm from moving. Spermicides can be conveniently purchased from drugstores and are easy to use, but they are not effective when used alone. Spermicides are most effective when used with another method of family planning, such as condoms.

Diaphragm:

The diaphragm is a soft rubber dome stretched over a flexible ring; the dome is filled with a spermicidal cream or jelly. The diaphragm is inserted into the vagina and placed over the cervix no more than 3 hours prior to intercourse.

Cervical Cap:

The cervical cap is a small cup made of latex rubber or plastic. The cervical cap is filled with a spermicidal cream or jelly and inserted into the vagina and placed over the cervix.

Contraceptive Sponge:

The contraceptive sponge is a soft saucer-shaped device made from polyurethane foam.

Hormonal Methods:

Whether administered as a pill, patch, shot, ring or implant, hormone medications contain manufactured forms of the hormones oestrogen and/or

progesterone. Hormonal methods work in one of three ways: 1) preventing a woman's ovaries from releasing an egg each month; 2) causing the cervical mucus to thicken making it harder for sperm to reach and penetrate the egg; 3) thinning the lining of the uterus which reduces the likelihood that a fertilized egg will implant in the uterus wall. Hormonal contraceptives do NOT protect against the transmission of sexually transmitted diseases.

Birth Control Pills

Many types of birth control pills are on the market. Pills keep a woman's ovaries from releasing eggs, thus preventing fertilisation. The main function of this type of the birth control the pill is to suppress ovulation, or 13 the release of an egg. Most birth control pills also thicken the cervical mucus, which aids in preventing pregnancy by blocking sperm from entering the uterus and fertilising an egg that may develop despite the pill.

Birth control pills are 95 percent effective with standard use. The mini pill contains only progestin, while the combination pill contains both progestin and oestrogen. Women who take these forms of the pill must be sure to take it at the same time each day or risk getting pregnant. Birth control pills require a prescription from a doctor or healthcare provider.

Depo-Provera:

Depo-Provera is an injection given by your health care provider that prevents pregnancy for three months.

Lunelle:

Lunelle is an injection given by your health care provider that prevents pregnancy for one month.

NuvaRing/Vaginal Ring:

NuvaRing, or vaginal ring, is a flexible ring that is inserted into the vagina for three weeks, removed for one week, and then replaced with a new ring. The ring releases estrogen and progesterone into your body.

Ortho Evra Patch/Birth Control Patch:

The birth control patch is placed directly on the skin with the hormones built into the sticky side of the patch.

>Each week for the first three weeks a patch is placed on the hip, buttocks or upper arm.

>The fourth week you are free from the patch allowing for a menstrual period.

Intrauterine Device (IUD):

An intrauterine device (IUD) is a small copper or plastic device inserted into the uterus that creates a hostile environment for sperm. Some IUDs release small amounts of hormones. IUDs last from 5 to 12 years and are an effective method of birth control but should only be used by women in monogamous relationships who have already given birth.

The IUD does not stop the sperm from entering into the uterus, but rather it changes cervical mucus decreasing the probability of fertilization and it

changes the lining of the uterus preventing implantation should fertilization occur.

Withdrawal

Neither withdrawal nor sterilisations prevent transmission of sexually transmitted diseases. Withdrawal involves the removal of the erect penis from the vagina prior to ejaculation.

Sterilisation

Men and women both have the option of undergoing minor surgical procedures in order to render themselves infertile. For men, this process is called a vasectomy, which prevents sperm from entering into the semen. For women, this process is called tubal ligation, and involves blocking or cutting the Fallopian tubes permanently to prevent sperm from fertilizing an egg. Both methods are considered permanent.

Female:

oSterilisation involves the surgical closing of the fallopian tubes which carry the eggs from the ovaries to the uterus

oThis procedure is referred to as a tubal ligation

Male:

oSterilisation involves the surgical closing of tubes that carry sperm

oThis procedure is referred to as a vasectomy

Birth control, also known as contraception, is designed to prevent pregnancy. Birth control methods may work in a number of different ways. These include

Preventing sperm from getting to the eggs - condoms, diaphragms and intrauterine devices (IUDs) work this way

Keeping the woman's ovaries from releasing eggs that could be fertilized - birth control pills work this way

Sterilisation, which permanently prevents a woman from getting pregnant or a man from being able to get a woman pregnant

Your choice of birth control should depend on several factors. These include your health, frequency of sexual activity, number of sexual partners and desire to have children in the future. Your health care provider can help you select the best form of birth control for you

Feature

What is the precise scope of the right to family planning? Perhaps the answer with the broadest global consensus comes from UNFPA, the United Nations Population Fund, whose family planning advocacy is supported by most of the UN's 192 member states. To promote human rights and women's equality, family planning services must "reject coercion" and "offer a wide selection of methods; reflect high standards of medical practice; [be] sensitive to cultural conditions; [and] provide sufficient information about proper use or possible side effects." However, "UNFPA does not support or promote abortion as a method of family planning."

Benefits

Voluntary family planning brings well-documented health benefits to individuals, families and communities. It reduces abortion as well as maternal, infant and child mortality rates. Specific methods have their own unique health advantages. Condoms, for example, help check the spread of HIV/AIDS and other sexually transmitted infections. The Lactational Amenorrhea Method gives mothers and babies the health benefits of breastfeeding. The availability of family planning in communities empowers women and children to improve their educational and economic status as well as their health.

Obstacles

Perhaps 200 million women on Earth want but cannot obtain family planning methods. Others lack proper instruction or access to their most preferred methods. In many places, gender-based violence sabotages women's own choices about family planning. Such violence makes women and children more vulnerable to further dangers like HIV/AIDS. In some countries, violence against women has included forced pregnancy prevention as a matter of government policy.

Controversies

While widely accepted and practiced, the right to family planning "has not been enshrined in a legally binding human rights treaty and...remains controversial" because of "fear of coercive family planning programmes; [the] idea that family planning promotes promiscuity; [the] abortion debate and status of the unborn child," according to the Human Rights Education Association.

BENEFITS OF FAMILY PLANNING

Financial Readiness

Planning when to add to your family can be delayed until you feel financially ready to raise a child. Although it's unlikely that you'd save the hundreds of thousands of dollars it costs to raise a child through age 17, you will be able to wait, for instance, until you have a stable job. In addition, family planning allows couples to space their children to lessen the financial burden of college.

Fertility Issues

Family planning will bring any fertility problems to light quickly if it is difficult to conceive once you are trying based on the woman's cycle. Twenty-five percent of couples will conceive on a first cycle and more than half have

conceived after six months, according to amazingpregnancy.com. If you are not pregnant after a year of trying, it's a good idea to get evaluated by your health care provider.

Health Benefits

Pregnancies that occur too close together can be harmful to both the mother's and the baby's health, according to the World Health Organization, which records more than 500,000 maternal deaths throughout the world each year. While health care in the United States has significantly lowered maternal death, doctors still advise waiting between pregnancy. A study in "Conception" cited in "Business Week" reported that babies conceived within six months of their siblings births had a 41 percent greater chance of premature birth. Other problems cited included low birth weight and birth defects.

Choosing Your Family Size

Family planning allows you to choose the size of your family based on your financial situation as well as your age and patience level. While there are always surprises with multiples, deciding how many children to have in your family gives you control over your financial future and theirs.

Time Management

For many working families, a single income is not enough to sustain the financial burden. If both parents in a household work and will continue to do so, it's vital that the spare time each has is spent nurturing the growth of the children. This becomes increasingly more difficult as more children are added to the household

Higher Education

Higher education in terms of you and your partner is a vital consideration for family planning. Seeking a degree or certification takes time, energy and money. The advantage of planning your family according to these demands will enable you to complete your education in a timelier fashion with much less stress, worry and guilt.

Family Dynamic

Whether you want two children, no children or twenty, family planning will help you build the family dynamic of your wishes. Decide what is right for your family based on the specific needs of each member, whether that means trying for another child naturally, sterilization, adoption or a different choice.

Residential

Conscious family planning will aid you in your decision to purchase and/or sell a home in a particular area. Depending on the desired growth of your family, what kind of schools you want your children to attend and the cost of living, you will better be able to choose a home that will suit the needs of your complete family

ADULT ADOPTION

The overwhelming majority of adoptions in the World involve adults adopting infants or children. However, there are situations in which an adult might adopt another adult. If you are considering adult adoption, it's important to understand the process, as well as any state laws that may apply to your specific case.

Identification

In an adult adoption, an adult adopts a consenting individual who is over 18 years of age. As with the adoption of a child, an adult adoption severs the legal relationship between the adoptee and his biological parents, and the adopter becomes the adoptee's legal parent.

Function

According to the website Adoption, there are several possible reasons for adult adoptions. If you have no heirs but you have a close relationship with an unrelated adult, you might want to form a legal parent-child relationship with that adult to ensure that your family name is carried on and/or that she inherits your estate. If your adult biological child was adopted or in foster care when she was young, you might want to legally reclaim your relationship as her parent. If you have a close relationship with an adult who has physical or mental disabilities, you might want her to benefit from your family health plan or to inherit your estate so that she will have the financial means to care for herself after your death.

Process

Adult adoptions follow the same process as child adoptions. You first file an adoption petition in your jurisdiction. If the court determines that you meet the state standard, it sets a hearing date. At the hearing, the judge evaluates the parties involved, and if he approves the adoption, he sets a second hearing date in order to finalize the adoption. Once the adoption is final, a new birth certificate is issued for the adoptee listing the adopter as the legal parent and noting any name changes the adoptee might have made. After the adoption, the adoption is sealed according to state law, just as in a child adoption.

State Laws

Adult adoption is legal in many countries, provided there is no intent to defraud. However, adoption laws vary widely from state to state. According to Adoption, most states require that the adopting party be older than the adoptee. Some states only allow adoptions of adults with diminished capacity. Some require that an adoptee's spouse consent to the adoption or that the adoptee's birth parents be notified. Still others only require that the parties in question agree to the arrangement. Check with your state to see if you meet your state's standards for adult adoption.

Considerations

Homosexual couples sometimes consider adoption as a means to ensure that their partner benefits from their inheritance and their family insurance. However, because the adoption process is meant to create a parent-child relationship, courts might reject a petition for an adoption of a sexual partner. According to Adoption, gay couples often are better off securing their partner's future by consulting an attorney and creating a will.

Birth control

Birth control is a regimen of one or more actions, devices, sexual practices, or medications followed in order to deliberately prevent or reduce the likelihood of pregnancy or childbirth. There are three main routes to preventing or ending pregnancy: the prevention of fertilization of the ovum by sperm cells ("contraception"), the prevention of implantation of the blastocyst ("contragestion"), and the chemical or surgical induction of abortion of the developing embryo or, later, foetus. In common usage, term "contraception" is often used for both contraception and contragestion.

Birth control is commonly used as part of family planning.

The history of birth control began with the discovery of the connection between coitus and pregnancy. The oldest forms of birth control included coitus interruptus, pessaries, and the ingestion of herbs that were believed to be contraceptive or abortifacient. The earliest record of birth control use is an ancient Egyptian set of instructions on creating a contraceptive pessary.

Different methods of birth control have varying characteristics. Condoms, for example, are the only methods that provide significant protection from sexually transmitted diseases. Cultural and religious attitudes on birth control vary significantly.

Methods of birth control

Physical methods reproductive technology

Physical methods may work in a variety of ways, among them: physically preventing sperm from entering the female reproductive tract; hormonally preventing ovulation from occurring; making the woman's reproductive tract inhospitable to sperm; or surgically altering the male or female reproductive tract to induce sterility. Some methods use more than one mechanism. Physical methods vary in simplicity, convenience and efficacy.

Barrier methods

Barrier methods place a physical impediment to the movement of sperm into the female reproductive tract.

The most popular barrier method is the male condom, a latex or polyurethane sheath placed over the penis. The condom is also available in a female version, which is made of polyurethane. The female condom has a flexible ring at each end — one secures behind the pubic bone to hold the condom in place, while the other ring stays outside the vagina.

Cervical barriers are devices that are contained completely within the vagina. The contraceptive sponge has a depression to hold it in place over the cervix. The cervical cap is the smallest cervical barrier. Depending on the type of cap, it stays in place by suction to the cervix or to the vaginal walls. The diaphragm fits into place behind the woman's pubic bone and has a firm but flexible ring, which helps it press against the vaginal walls.

Spermicide may be placed in the vagina before intercourse and creates a chemical barrier. Spermicide may be used alone, or in combination with a physical barrier.

Hormonal methods

There are variety of delivery methods for hormonal contraception. Forms of synthetic oestrogens and progestins (synthetic progestogens) combinations commonly used include the combined oral contraceptive pill ("The Pill"), the Patch, and the contraceptive vaginal ring ("NuvaRing"). A monthly injectable form, Lunelle, is not currently available for sale in the United States.

Other methods contain only a progestin (a synthetic progestogen). These include the progesterone only pill (the POP or 'minipill'), the injectables Depo Provera (a depot formulation of medroxyprogesterone acetate given as an intramuscular injection every three months) and Noristerat (Norethindrone acetate given as an intramuscular injection every 8 weeks), and contraceptive implants. The progestin-only pill must be taken at more precisely remembered times each day than combined pills. The first contraceptive implant, the original 6-capsule Norplant, was removed from the market in the United States in 1999, though a newer single-rod implant called Implanon was approved for sale in the United States on July 17, 2006. The various progestin-only methods may cause irregular bleeding during use.

Ormeloxifene (Centchroman)

Ormeloxifene (Centchroman) is a selective estrogen receptor modulator, or SERM. It causes ovulation to occur asynchronously with the formation of the uterine lining, preventing implantation of a zygote. It has been widely available as a birth control method in India since the early 1990s, marketed under the trade name Saheli. Centchroman is legally available only in India. [

Emergency contraception

Some combined pills and POPs may be taken in high doses to prevent pregnancy after a birth control failure (such as a condom breaking) or after unprotected sex. Hormonal emergency contraception is also known as the "morning after pill," although it is licensed for use up to three days after intercourse.

Copper intrauterine devices may also be used as emergency contraception. For this use, they must be inserted within five days of the birth control failure or unprotected intercourse.

Emergency contraception appears to work by suppressing ovulation. However, because it might prevent a fertilized egg from implanting, some people[who?] consider it a form of abortion. The details of the possible methods of action are still being studied.

Intrauterine methods

An intrauterine device. These are contraceptive devices which are placed inside the uterus. They are usually shaped like a "T" — the arms of the T hold the device in place. There are two main types of intrauterine contraceptives: those that contain copper (which has a spermicidal effect), and those that release a progestogen (in the US the term progestin is used).

Terms used for these devices differ between the United Kingdom and the United States. In the US, all devices which are placed in the uterus to prevent pregnancy are referred to as intrauterine devices (IUDs) or intrauterine contraceptive devices (IUCDs). In the UK, only copper-containing devices are called IUDs (or IUCDs), and hormonal intrauterine contraceptives are called Intra-Uterine System (IUS). This may be because there are ten types of copper IUDs available in the UK,[19] compared to only one in the US.

Sterilization

Surgical sterilization is available in the form of tubal ligation for women and vasectomy for men. Sterilization should be considered permanent. In women, the process may be referred to as "tying the tubes," but the Fallopian tubes may be tied, cut, clamped, or blocked. This serves to prevent sperm from joining the unfertilized egg. The non-surgical sterilization procedure, Essure, is an example of a procedure that blocks the tubes, wherein micro-inserts are placed into the fallopian tubes by a catheter passed from the vagina through the cervix and uterus.

Although tubal ligation should be considered a permanent procedure, it is possible to attempt a tubal ligation reversal to reconnect the Fallopian tubes. The rate of success depends on the type of tubal ligation procedure that was originally performed and damage done to the tubes as well as the woman's age.

Behavioral methods

Behavioral methods involve regulating the timing or methods of intercourse to prevent the introduction of sperm into the female reproductive tract, either altogether or when an egg may be present.

Fertility awareness

Symptoms-based methods of fertility awareness involve a woman's observation and charting of her body's fertility signs, to determine the fertile and infertile phases of her cycle. Charting may be done by hand or with the assistance of software. Most methods track one or more of the three primary fertility signs:

changes in basal body temperature, in cervical mucus, and in cervical position. If a woman tracks both basal body temperature and another primary sign, the method is referred to as symptothermal. Other bodily cues such as mittelschmerz are considered secondary indicators.

Fertility monitors are computerized devices that determine fertility or infertility based on, for example, temperature or urinalysis tests. Calendar-based methods such as the rhythm method and Standard Days Method estimate the likelihood of fertility based on the length of past menstrual cycles. To avoid pregnancy with fertility awareness, unprotected sex is restricted to the least fertile period. During the most fertile period, barrier methods may be availed, or she may abstain from intercourse.

The term natural family planning (NFP) is sometimes used to refer to any use of fertility awareness methods. However, this term specifically refers to the practices which are permitted by the Roman Catholic Church — breastfeeding infertility, and periodic abstinence during fertile times. FA methods may be used by NFP users to identify these fertile times.

Coitus interruptus

Coitus interruptus (literally "interrupted sexual intercourse"), also known as the withdrawal method, is the practice of ending sexual intercourse ("pulling out") before ejaculation. The main risk of coitus interruptus is that the man may not perform the maneuver correctly, or may not perform the maneuver in a timely manner. Although concern has been raised about the risk of pregnancy from sperm in pre-ejaculate, several small studies have failed to find any viable sperm in the fluid.

Avoiding vaginal intercourse

The risk of pregnancy from non-vaginal sex, such as with anal sex, oral sex, or non-penetrative sex is virtually zero[citation needed]. A very small risk comes from the possibility of semen leaking onto the vulva (with anal sex) or coming into contact with an object, such as a hand, that later contacts the vulva.

Total abstinence

Different groups define the term sexual abstinence in different ways. When used in discussions of birth control, usually the avoidance of all sexual activity—total sexual abstinence—is the intended meaning. Sometimes people choose to be sexually abstinent to reduce their risk of pregnancy, and abstinence may be included in lists of birth control methods. Those who are sexually abstinent do not have unplanned pregnancies. Other sources instead classify abstinence as not being a form of birth control.

Abstinence as a long term method is not 100% effective in preventing pregnancy: not everyone who intends to be abstinent refrains from all sexual activity, and in many populations there is a significant risk of pregnancy from nonconsensual sex. As a public health measure, it is estimated that the

protection provided by abstinence may be similar to that of condoms. Some authorities recommend that those using abstinence as a primary method have backup method(s) available (such as condoms or emergency contraceptive pills).

Lactational

Most breastfeeding women have a period of infertility after the birth of their child. The lactational amenorrhea method, or LAM, gives guidelines for determining the length of a woman's period of breastfeeding infertility.

Induced abortion

In some areas, women use abortion as a primary means to control birth. This practice is more common in Russia,[30] Turkey,[31] and Ukraine.[32] On the other hand, women from Canada[33], and other places[citation needed] generally do not use abortion as a primary form of birth control. Abortion is subject to ethical debate.

Surgical abortion methods include suction-aspiration abortion (used in the first trimester) or dilation and evacuation (used in the second trimester). Medical abortion methods involve the use of medication which is swallowed or inserted vaginally to induce abortion. Medical abortion can be used if the length of gestation has not exceeded 8 weeks.

Some herbs are considered abortifacient, and some animal studies have found various herbs to be effective in inducing abortion in non-human animal species. Humans generally do not use herbs when other methods are available, due to the unknown efficacy and due to risks of toxicity..

Methods in development

For females

□ Praneem is a polyherbal vaginal tablet being studied as a spermicide, and a microbicide active against HIV.

□ BufferGel is a spermicidal gel being studied as a microbicide active against HIV.

□ Duet is a disposable diaphragm in development that will be pre-filled with BufferGel. It is designed to deliver microbicide to both the cervix and vagina. Unlike currently available diaphragms, the Duet will be manufactured in only one size and will not require a prescription, fitting, or a visit to a doctor.

□ The SILCS diaphragm is a silicone barrier which is still in clinical testing. It has a finger cup molded on one end for easy removal. Like the Duet, the SILCS is novel in that it will only be available in one size.

□ A vaginal ring is being developed that releases both estrogen and progesterone, and is effective for over 12 months.

□ Two types of progestogen-only vaginal rings are being developed. Progestogen-only products may be particularly useful for women who are breastfeeding. The rings may be used for four months at a time.

□ A progesterone-only contraceptive is being developed that would be sprayed onto the skin once a day.

□ Quinacrine sterilization and the Adiana procedure are two permanent methods of birth control being developed

For males

: Male contraceptive

Other than condoms and withdrawal, there are currently no available methods of reversible contraception which males can use or control. Several methods are in research and development:

□ As of 2007, a chemical called Adjudin is currently in Phase II human trials as a male oral contraceptive.[42]

□ RISUG (Reversible Inhibition of Sperm Under Guidance), is an experimental injection into the vas deferens that coats the walls of the vas with a spermicidal substance. The method can potentially be reversed by washing out the vas deferens with a second injection.

□ Experiments in vas-occlusive contraception involve an implant placed in the vasa deferentia.

□ Experiments in heat-based contraception involve heating the testicles to a high temperature for a short period of time.

Misconceptions

Modern misconceptions and urban legends have given rise to a great many false claims:

□ The suggestion that douching with any substance immediately following intercourse works as a contraceptive is untrue. While it may seem like a sensible idea to try to wash the ejaculate out of the vagina, it is not likely to be effective. Due to the nature of the fluids and the structure of the female reproductive tract, douching most likely actually spreads semen further towards the uterus. Some slight spermicidal effect may occur if the douche solution is particularly acidic, but overall it is not scientifically observed to be a reliably effective method. Douching is neither a contraceptive nor a preventative measure against STDs or other infections.

□ It is untrue that a female cannot become pregnant as a result of the first time she engages in sexual intercourse.

- While women are usually less fertile for the first few days of menstruation, it is a myth that a woman absolutely cannot get pregnant if she has sex during her period.
- Having sex in a hot tub does not prevent pregnancy, but may contribute to vaginal infections.
- Although some sex positions may encourage pregnancy, no sexual positions prevent pregnancy. Having sex while standing up or with a woman on top will not keep the sperm from entering the uterus. The force of ejaculation, the contractions of the uterus caused by prostaglandins in the semen, as well as ability of sperm to swim overrides gravity.
- Urinating after sex does not prevent pregnancy and is not a form of birth control, although it is often advised anyway to help prevent urinary tract infections.
- Toothpaste cannot be used as an effective contraceptive.

Effectiveness

Effectiveness is measured by how many women become pregnant using a particular birth control method in the first year of use. Thus, if 100 women use a method that has a 12 percent first-year failure rate, then sometime during the first year of use, 12 of the women should become pregnant.

The most effective methods in typical use are those that do not depend upon regular user action. Surgical sterilization, Depo-Provera, implants, and intrauterine devices (IUDs) all have first-year failure rates of less than one percent for perfect use. In reality, however, perfect use may not be the case, but still, sterilization, implants, and IUDs also have typical failure rates under one percent. The typical failure rate of Depo-Provera is disagreed upon, with figures ranging from less than one percent up to three percent.

Other methods may be highly effective if used consistently and correctly, but can have typical use first-year failure rates that are considerably higher due to incorrect or ineffective usage by the user. Hormonal contraceptive pills, patches or rings, fertility awareness methods, and the lactational amenorrhea method (LAM), if used strictly, have first-year (or for LAM, first-6-month) failure rates of less than 1%.

In one survey, typical use first-year failure rates of hormonal contraceptive pills (and by extrapolation, patches or rings) were as high as five percent per year. Fertility awareness methods as a whole have typical use first-year failure rates as high as 25 percent per year; however, as stated above, perfect use of these methods reduces the first-year failure rate to less than 1%.

Condoms and cervical barriers such as the diaphragm have similar typical use first-year failure rates (14 and 20 percent, respectively), but perfect usage of the condom is more effective (three percent first-year failure vs six percent) and condoms have the additional feature of helping to prevent the spread of sexually transmitted diseases such as the HIV virus. The withdrawal method, if used consistently and correctly, has a first-year failure rate of four percent. Due to the difficulty of consistently using withdrawal correctly, it has a typical use first-year failure rate of 19 percent, and is not recommended by some medical professionals.

Combining two birth control methods, can increase their effectiveness to 95% or more for less effective methods. Using condoms with another birth control method is also one of the recommended methods of reducing risk of getting sexually transmitted infections, including HIV. This approach is one of the Dual Protection Strategies.

Protection against sexually transmitted infections

Some methods of birth control also offer protection against sexually transmitted infections (STIs). The male latex condom offers some protection against some STIs with correct and consistent use, as does the female condom, although the latter has only been approved for vaginal sex. The female condom may offer greater protection against STIs that pass through skin to skin contact, as the outer ring covers more exposed skin than the male condom. Some of the methods involving avoiding vaginal intercourse can also reduce risk: latex or polyurethane barriers can be used during oral sex, and mutual or solo masturbation are very low-risk. The remaining methods of birth control do not offer significant protection against the sexual transmission of STIs.

Many STIs may also be transmitted non-sexually; this is one reason why abstinence from sexual behavior does not guarantee 100 percent protection against sexually transmitted infections. For example, HIV may be transmitted through contaminated needles which may be used in intravenous drug use, tattooing, body piercing, or injections. Health-care workers have acquired HIV through occupational exposure to accidental injuries with needles.[56]

Religious and cultural attitudes

Religious views on birth control

Religions vary widely in their views of the ethics of birth control. In Christianity, the Roman Catholic Church accepts only Natural Family Planning and only for serious reasons,[57] while Protestants maintain a wide range of views from allowing none to very lenient.[58] Views in Judaism range from the stricter Orthodox sect to the more relaxed Reform sect.[59] In Islam, contraceptives are allowed if they do not threaten health, although their use is discouraged by some. Hindus may use both natural and artificial contraceptives. A common Buddhist view of birth control is that preventing conception is ethically acceptable, while intervening after conception has occurred or may have occurred is not.

Birth control education

Many teenagers, most commonly in developed countries, receive some form of sex education in school. What information should be provided in such programs is hotly contested, especially in the United States and United Kingdom. Possible topics include reproductive anatomy, human sexual behavior, information on sexually transmitted diseases (STDs), social aspects of sexual interaction, negotiating skills intended to help teens follow through with a decision to remain abstinent or to use birth control during sex, and information on birth control methods.

One type of sex education program used in some more conservative areas of the United States is called abstinence-only education, and it promotes complete sexual abstinence until marriage.

The programs do not encourage birth control, often provide inaccurate information about contraceptives and sexuality, stress failure rates of condoms and other contraceptives, and teach strategies for avoiding sexually intimate situations. Advocates of abstinence-only education believe that the programs will result in decreased rates of teenage pregnancy and STD infection. In a non-random, Internet survey of 1,400 women who found and completed a 10-minute multiple-choice online questionnaire listed in one of several popular search engines, women who received sex education from schools providing primarily abstinence information, or contraception and abstinence information equally, reported fewer unplanned pregnancies than those who received primarily contraceptive information, who in turn reported fewer unplanned pregnancies than those who received no information. However, randomized controlled trials demonstrate that abstinence-only sex education programs increase the rates of pregnancy and STDs in the teenage population. Professional medical organizations, including the AMA, AAP, ACOG, APHA, APA, and Society for Adolescent Medicine, support comprehensive sex education (providing abstinence and contraceptive information) and oppose the sole use of abstinence-only sex education.

Pregnancy

Pregnancy (latin "graviditas") is the carrying of one or more offspring, known as a fetus or embryo, inside the uterus of a female. In a pregnancy, there can be multiple gestations, as in the case of twins or triplets. Human pregnancy is the most studied of all mammalian pregnancies. Obstetrics is the surgical field that studies and cares for high risk pregnancy. Midwifery is the non-surgical field that cares for pregnancy and pregnant women.

Childbirth usually occurs about 38 weeks after conception; i.e., approximately 40 weeks from the last normal menstrual period (LNMP) in humans. The World Health Organization defines normal term for delivery as between 37 weeks and 42 weeks. The calculation of this date involves the assumption of a regular 28-day menstrual cycle.

Terminology One scientific term for the state of pregnancy is gravid, and a pregnant female is sometimes referred to as a gravida. Neither word is used in common speech. Similarly, the term "parity" (abbreviated as "para") is used for the number of previous successful live births. Medically, a woman who has never been pregnant is referred to as a "nulligravida", and in subsequent pregnancies as multigravida or "multiparous". Hence, during a second pregnancy a woman would be described as "gravida 2, para 1" and upon live delivery as "gravida 2, para 2." An in-progress pregnancy, as well as abortions, miscarriages, or stillbirths account for parity values being less than the gravida number, whereas a multiple birth will increase the parity value. Women who have never carried a pregnancy achieving more than 20 weeks of gestation age are referred to as "nulliparous". The medical term for a woman who is pregnant for the first time is primigravida.

The term embryo is used to describe the developing offspring during the first 8 weeks following conception, and the term fetus is used from about 2 months of development until birth.

In many societies' medical or legal definitions, human pregnancy is somewhat arbitrarily divided into three trimester periods, as a means to simplify reference to the different stages of prenatal development. The first trimester carries the highest risk of miscarriage (natural death of embryo or fetus). During the second trimester, the development of the fetus can be more easily monitored and diagnosed. The beginning of the third trimester often approximates the point of viability, or the ability of the fetus to survive, with or without medical help, outside of the uterus.

Progression

Stages in prenatal development, with weeks and months numbered by gestation.

Initiation

Pregnancy occurs as the result of the female gamete or oocyte merging with the male gamete, spermatozoon, in a process referred to, in medicine, as "fertilization," or more commonly known as "conception." After the point of "fertilization," it is referred to as an egg. The fusion of male and female gametes usually occurs through the act of sexual intercourse, resulting in spontaneous pregnancy. However, the advent of artificial insemination and in vitro fertilisation have also made achieving pregnancy possible in cases where sexual intercourse does not result in fertilization (e.g., through choice or male/female infertility).

Perinatal period

Perinatal defines the period occurring "around the time of birth", specifically from 22 completed weeks (154 days) of gestation (the time when birth weight is normally 500 g) to 7 completed days after birth.

Legal regulations in different countries include gestation age beginning from 16 to 22 weeks (5 months) before birth.

Postnatal period

The postnatal period begins immediately after the birth of a child and then extends for about six weeks. During this period the mother's body returns to prepregnancy conditions as far as uterus size and hormone levels are concerned.

Duration

The expected date of delivery (EDD) is 40 weeks counting from the last menstrual period (LMP), and birth usually occurs between 37 and 42 weeks. The actual pregnancy duration is typically 38 weeks after conception. Though pregnancy begins at conception, it is more convenient to date from the first day of a woman's last menstrual period, or from the date of conception if known. Starting from one of these dates, the expected date of delivery can be calculated. Forty weeks is 9 months and 6 days, which forms the basis of Naegele's rule for estimating date of delivery. More accurate and sophisticated algorithms take into account other variables, such as whether this is the first or subsequent child (i.e., pregnant woman is a primip or a multip, respectively), ethnicity, parental age, length of menstrual cycle, and menstrual regularity.

Fewer than 5% of births occur on the due date; 50% of births are within a week of the due date, and almost 90% within 2 weeks. It is much more useful, therefore, to consider a range of due dates, rather than one specific day, with some online due date calculators providing this information.

Accurate dating of pregnancy is important, because it is used in calculating the results of various prenatal tests (for example, in the triple test). A decision may be made to induce labour if a fetus is perceived to be overdue. Furthermore, if LMP and ultrasound dating predict different respective due dates, with the latter being later, this might signify slowed fetal growth and therefore require closer review.

The Age of Viability has been receding relentlessly as medical revolution continues to unfold. Whereas it used to be 28 weeks, it has been brought back to as early as 23, or even 22 weeks in some countries. Unfortunately, there has been a profound increase in morbidity and mortality associated with the increased survival to the extent it has led some to question the ethics and morality of resuscitating at the edge of viability.

Childbirth

Childbirth is the process whereby an infant is born. It is considered by many to be the beginning of the infant's life, and age is defined relative to this event in most cultures. A woman is considered to be in labour when she begins experiencing regular uterine contractions, accompanied by changes of her cervix — primarily effacement and dilation. While childbirth is widely experienced as painful, some women do report painless labours, while others find that concentrating on the birth helps to quicken labour and lessen the sensations. Most births are successful vaginal births, but sometimes complications arise and a woman may undergo a cesarean section.

During the time immediately after birth, both the mother and the baby are hormonally cued to bond, the mother through the release of oxytocin, a hormone also released during breastfeeding.

Diagnosis

The beginning of pregnancy may be detected in a number of different ways, either by a pregnant woman without medical testing, or by using medical tests with or without the assistance of a medical professional.

Most pregnant women experience a number of symptoms, which can signify pregnancy. The symptoms can include nausea and vomiting, excessive tiredness and fatigue, craving for certain foods not normally considered a favorite, and frequent urination particularly during the night.

Pregnancy detection can be accomplished using one or more of various pregnancy tests, which detect hormones generated by the newly formed placenta. Clinical blood and urine tests can detect pregnancy 12 days after implantation which is as early as 6 to 8 days after fertilization. Blood pregnancy tests are more accurate than urine tests. Home pregnancy tests are personal urine tests, which normally cannot detect a pregnancy until at least 12 to 15 days after fertilization. Both clinical and home tests can only detect the state of pregnancy, and cannot detect the age of the embryo.

In the post-implantation phase, the blastocyst secretes a hormone named human chorionic gonadotropin, which in turn stimulates the corpus luteum in the woman's ovary to continue producing progesterone. This acts to maintain the lining of the uterus so that the embryo will continue to be nourished. The glands in the lining of the uterus will swell in response to the blastocyst, and capillaries will be stimulated to grow in that region. This allows the blastocyst to receive vital nutrients from the woman.

Despite all the signs, some women may not realize they are pregnant until they are quite far along in their pregnancy, in some cases not even until they begin labour. This can be caused by many factors, including irregular periods (quite common in teenagers), certain medications (not related to conceiving children), and obese women who disregard their weight gain. Others may be in denial of their situation.

Physiology

Pregnancy is typically broken into three periods, or trimesters, each of about three months. While there are no hard and fast rules, these distinctions are useful in describing the changes that take place over time.

First trimester

Traditionally, doctors have measured pregnancy from a number of convenient points, including the day of last menstruation, ovulation, fertilization, implantation and chemical detection. In medicine, pregnancy is often defined as beginning when the developing embryo becomes implanted into the endometrial lining of a woman's uterus. In some cases where complications may have arisen, the fertilized egg might implant itself in the fallopian tubes or the cervix, causing an ectopic pregnancy. Most pregnant women do not have any specific signs or symptoms of implantation, although it is not uncommon to experience minimal bleeding at implantation. Some women will also experience cramping during their first trimester. This is usually of no concern unless there is spotting or bleeding as well. After implantation the uterine endometrium is called the decidua. The placenta, which is formed partly from the decidua and partly from outer layers of the embryo, is responsible for transport of nutrients and oxygen to, and removal of waste products from the fetus. The umbilical cord is the connecting cord from the embryo or fetus to the placenta. The developing embryo undergoes tremendous growth and changes during the process of fetal development.

Morning sickness occurs in about seventy percent of all pregnant women and typically improves after the first trimester.

In the first 12 weeks of pregnancy the nipples and areolas darken due to a temporary increase in hormones.

Most miscarriages occur during this period.

Second trimester

Months 4 through 6 of the pregnancy are called the second trimester. Most women feel more energized in this period, and begin to put on weight as the symptoms of morning sickness subside and eventually fade away.

In the 20th week the uterus, the muscular organ that holds the developing fetus, can expand up to 20 times its normal size during pregnancy. Although the fetus begins to move and takes a recognizable human shape during the first trimester, it is not until the second trimester that movement of the fetus, often referred to as "quickening", can be felt. This typically happens in the fourth month, more specifically in the 20th to 21st week, or by the 19th week if the woman has been pregnant before. However, it is not uncommon for some women not to feel the fetus move until much later. The placenta fully functions at this time and the fetus makes insulin and urinates. The reproductive organs distinguish the fetus as male or female.

Third trimester

Comparison of growth of the abdomen between 26 weeks and 40 weeks gestation.

Final weight gain takes place, which is the most weight gain throughout the pregnancy. The fetus will be growing the most rapidly during this stage, gaining up to 28g per day. The woman's belly will transform in shape as the belly drops due to the fetus turning in a downward position ready for birth. During the

second trimester, the woman's belly would have been very upright, whereas in the third trimester it will drop down quite low, and the woman will be able to lift her belly up and down. The fetus begins to move regularly, and is felt by the woman. Fetal movement can become quite strong and be disruptive to the woman. The woman's navel will sometimes become convex, "popping" out, due to her expanding abdomen.

This period of her pregnancy can be uncomfortable, causing symptoms like weak bladder control and back-ache. Movement of the fetus becomes stronger and more frequent and via improved brain, eye, and muscle function the fetus is prepared for ex utero viability. The woman can feel the fetus "rolling" and it may cause pain or discomfort when it is near the woman's ribs and spine.

It is during this time that a baby born prematurely may survive. The use of modern medical intensive care technology has greatly increased the probability of premature babies surviving, and has pushed back the boundary of viability to much earlier dates than would be possible without assistance. In spite of these developments, premature birth remains a major threat to the fetus, and may result in ill-health in later life, even if the baby survives.

Prenatal development and sonograph images

Prenatal development is divided into two primary biological stages. The first is the embryonic stage, which lasts for about two months. At this point, the fetal stage begins. At the beginning of the fetal stage, the risk of miscarriage decreases sharply, all major structures including hands, feet, head, brain, and other organs are present, and they continue to grow and develop. When the fetal stage commences, a fetus is typically about 30 mm (1.2 inches) in length, and the heart can be seen beating via sonograph; the fetus bends the head, and also makes general movements and startles that involve the whole body. Some fingerprint formation occurs from the beginning of the fetal stage.

Electrical brain activity is first detected between the 5th and 6th week of gestation, though this is still considered primitive neural activity rather than the beginning of conscious thought, something that develops much later in fetation. Synapses begin forming at 17 weeks, and at about week 28 begin multiply at a rapid pace which continues until 3–4 months after birth. It isn't until week 23 that the fetus can survive, albeit with major medical support, outside of the womb. It is not until then that the fetus possesses a sustainable human brain.

Embryo at 4 weeks after fertilization	Fetus at 8 weeks after fertilization	Fetus at 18 weeks after fertilization	Fetus at 38 weeks after fertilization
Relative size in 1st month (simplified illustration)	Relative size in 3rd month (simplified illustration)	Relative size in 5th month (simplified illustration)	Relative size in 9th month (simplified illustration)

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