

ADOLESCENT HEALTH



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REPRODUCTIVE HEALTH

Objectives

- Discuss puberty
 - Physiological changes
 - Abnormal puberty
- Discuss adolescence and youth
 - Sexual and RH of adolescents and young adults
 - Opportunities and challenges
 - Response of the health sector to meet their needs

Puberty

- Represents the final maturation phase of the reproductive system
- Period when endocrine and gametogenic function of gonads first develop to point when reproduction is possible
- Gonads remain quiescent till activation by pituitary gonadotropins

Control

- From birth through puberty, unclear neural mechanism prevents the pulsatile GnRH release that is present in adulthood
- Critical weight seems necessary;
 - Falling age of puberty may be due to obesity
 - 1-3 months every decade for last 175 years in Europe and USA
 - Young athletes and those with anorexia nervosa stop menstruating 2° to weight loss
- Leptin, may offer the link between body weight and puberty, via unknown mechanism
 - a satiety-producing hormone from fat cells

Stages

- Thelarche: the development of breasts
- Pubarche: the development of axillary and pubic hair
- Menarche
- Adrenarche-
 - 8-10 years in girls and 10-12 years in boys
 - Increase in adrenal androgen secretion without associated rise in ACTH or cortisol
 - Change in adrenal enzyme system resulting in diversion of pregnenolone to androgen pathway
 - May be a response to a pituitary adrenal androgen-stimulating hormone (AASH)
 - Pubic and axillary hair growth
- GH- growth spurt starts with hands and feet moving proximally to trunk

Thelarche/Pubarche

(Tanner JM, *Growth of Adolescence*, 1962)

Stage	Breasts (Girls)	Pubic Hair
1	Preadolescent-Elevation of papillae	No pubic hair
2	Breast bud- elevation of breasts and papillae as small mounds with enlargement of areolar diameter	Sparse growth, along labia, of long, slightly pigmented downy hair, straighter slightly curved
3	Enlargement and elevation of breasts without separation of contours	Darker, coarser more curled hair growing sparsely over pubic area
4	Areolas and papillae project from breast to form 2° mound	Resembles adult type but covers smaller area
5	Mature, projection of papillae only, with recession of areolas into general contour of breast	Adult quantity and type

Testicular Enlargement

Stage	Genitalia	TV in ml
1	Prepubertal	<4
2	Testicular and scrotal enlargement	4-8
3	Increase in penile length	8-10
4	Further increase in penile length and thickness	10-15
5	Adult size	15-25

Adolescence

- ❑ **“No longer children, not yet adults”**
- ❑ Adolescence is a period of rapid development and dynamic change representing the transition from childhood to adulthood.
- ❑ Includes physical and sexual maturation, movement toward social and economic independence, and development of identity.
- ❑ Has largely been ignored because the age group has survived the diseases of childhood and those of adulthood are still remote.

Adolescence

- ❑ Associated with acquisition of new capacities but also challenges from many new situations.
- ❑ Behavior patterns established during this process, e.g. smoking/drug use or non-use, sexual risk-taking or protection, can have long-lasting negative or positive effects on future health and well-being.
- ❑ Decisions made at this time determine future well-being and last a lifetime.
- ❑ Neglect of adolescents can lead to problems, both immediately and in the years ahead.

Definitions

- ❑ Adolescent- between childhood and adulthood (*adolescere* (L)- grow up),
- ❑ Period of transition from childhood to adulthood
- ❑ Age 10-19y (WHO)
- ❑ Young Adult- 20-24y
- ❑ Generally, 10-24y grouped together as adolescent and young adult
- ❑ Adolescents differ from young children and from adults.

Epidemiology

- >25% of world's population (≈ 1.7 b people) aged 10-24.
- 85% of adolescents live in developing countries, where in many places they represent 30% of the population.
- Kenya- 26% of the population

Opportunities/Challenges

- More than ever before, adolescents are able to attend school and benefit from technological progress
 - Worldwide secondary school enrolment ~60%
 - 300 - 500m adolescents do not attend school
- At the same time, the lives of millions of adolescents are marred by;
 - poverty
 - inadequate education and work opportunities
 - exploitation (at least 73 million adolescent workers aged 10-14)
 - war and civil unrest (child soldiers, victims of war/refugees)
 - ethnic and gender discrimination
 - Malnutrition (under-nutrition and stunting are prevalent in developing countries while obesity is a growing problem in all societies).

Opportunities/Challenges

- ❑ Rapid urbanization, telecommunication, travel and migration bring both new possibilities and new risks to young people
- ❑ These conditions may directly jeopardize health and may also undermine the traditional social support that helps young people prepare for, negotiate and explore the opportunities and demands of their passage to adulthood

Challenges

- ❑ Society's expectations of behaviours, roles, access to resources and prospects for development vary for adolescent boys and girls
- ❑ Decreasing influence of family and culture, earlier puberty and later marriage all extend the risks of unprotected sexual activity in unmarried adolescents in many parts of the world

Challenges

- Early marriage and childbearing lead to high maternal and infant mortality rates
- Sexually transmitted infections, including HIV/AIDS, pose enormous health risks
- Potentially harmful substances (tobacco, alcohol, other drugs) are now more readily available to adolescents and threaten their health in both the short and long term
 - Worldwide 150m adolescents use tobacco: 50% will die of tobacco-related diseases later in life

Challenges

- ❑ Violence inflicted by and on YP is a growing phenomenon.
- ❑ Young men frequently take part in acts of violence, including wars, gangs (for hire)...
- ❑ Suicide attempts appear to be on the increase among the young
- ❑ Are also victims of violence, including sexual abuse, often perpetrated by adults

Adolescence: a gateway to the promotion of health

- Many of the behavioral patterns acquired during adolescence e.g. gender relations, sexual conduct, tobacco use, alcohol/other drugs, eating habits, and dealing with conflicts and risks etc;
 - will last a lifetime
 - will affect the health and well-being of future children
- Adolescence provides opportunities to prevent the onset of health-damaging behaviors and their future repercussions
- AYA are receptive to new ideas and keen to make the most of their growing capacity for making decisions

Adolescence: a gateway to the promotion of health

- Their curiosity and interest are a tremendous opening to foster personal responsibility for health
- Engaging in positive and constructive activities provides occasions to forge relationships with adults and peers as well as acquire behaviors that are crucial to health

Interrelated Problems

- The health problems of adolescents are interrelated
- Many of the factors that underlie unhealthy development in adolescents stem from the social environment
- They include;
 - poverty and unemployment
 - gender and ethnic discrimination
 - the impact of social change on family and communities

Interrelated Problems

- Their attitudes and behaviours (e.g. sexual behaviour and gender relations, use of substances, dealing with conflicts and risks), often arise from and feed off one another
 - use of psychoactive substances alters judgment leading to aggressive acts, unprotected sex and accidents
 - WHO estimates that 70% of adult premature deaths are due to behaviour initiated during adolescence
- The preventive interventions for these behaviours are the same and all contribute to positive personal growth and development

Challenges of Sexuality

- ❑ Early sexual debut
- ❑ Unplanned, unintended pregnancy
- ❑ Abortion
- ❑ STI/HIV/AIDS
- ❑ Lack of information/education on RH services
- ❑ Inaccessible ARH services- non-YFS
- ❑ Sexual assault/rape/coercive sex
- ❑ Homosexuality
- ❑ Myths and misconceptions
- ❑ Intergenerational and transactional sex

Social and Behavioral Challenges

- ❑ Risky sexual behavior
- ❑ Alcohol and substance abuse
- ❑ Violence/crime
- ❑ School drop-out/truancy
- ❑ Child Labor
- ❑ Early Marriage
- ❑ FGC/FGM

Biological Challenges

- Pubertal changes- lack of info, misinformation
- Predisposition to HIV/AIDS
 - 50% of new HIV infections occur in YP (~7,000 get infected daily)
 - 30% of the 40+ million PLWAs are aged 15-24 years
 - vast majority of HIV+ YP do not know their status
 - most sexually active YP do not know HIV status of their partners
 - Intergenerational sex
 - Immature genital tract
 - Presence of other STIs
 - HPV infection → CC later in life

Biological Challenges- Pregnancy

- Poorer outcome than older women, even when planned/wanted;
 - Late or no ANC
 - PET
 - Spontaneous abortion
 - Premature labour/delivery
 - SB
 - CPD/OL
 - Obstetric fistula; VVF/RVF
 - NND/PNM
 - Socioeconomic
 - Schooling/career
 - Large families
 - Lack of family and/or social support

Interventions

- ❑ Assist them acquire accurate information
- ❑ Build life skills
- ❑ Encourage and support abstinence, delay sex, other forms of expression in relationships, mutual monogamy, condom use
- ❑ Pregnancy prevention
 - Benefits of delaying childbearing
 - What methods?
 - ECP
- ❑ STI/HIV prevention
- ❑ Cervical screening?
- ❑ Obtain counselling (especially during crises)
- ❑ Youth–friendly health and other services
- ❑ Legislation

Interventions- HIV/AIDS

- UN General Assembly Special Session on HIV/AIDS in 2001 endorsed a number of goals for YP, including:
 - "... by 2005, reduce HIV prevalence among young men and women aged 15-24 in the most affected countries by 25% and by 25% globally by 2010"
 - "By 2005, ensure that at least 90%, and by 2010 at least 95% of young men and women have access to the information, education, including peer education and youth-specific education, and services necessary to develop the life skills required to reduce their vulnerability to HIV infection; in full partnership with youth, parents, families, educators and health care providers."

HIV/AIDS

- ❑ Fortunately, most YP are not infected
- ❑ During early adolescence HIV rates are the lowest of any period during the life cycle
- ❑ The challenge is to keep them uninfected
- ❑ Focusing on YP is likely to be the most effective approach to confronting the epidemic, particularly in high prevalence countries
- ❑ Encouraging reports of reduction in incidence from 50 to 40% this year (UNAIDS, 2006)

Interventions

- Have access to health services, including those for reproductive health
- Provide youth-friendly services
- Teach and encourage involvement of young men in RH issues- responsibility
- Live in a safe and supportive environment
- Youth-adult partnerships
 - Actively involvement in program design and service delivery
 - Participation in decisions affecting them

Interventions

- ❑ Social environment must foster personal development and encourage young people to adopt healthy behaviours.
- ❑ Policies and the media can strengthen and communicate positive norms for both adult and adolescent behaviours, such as those related to equality and gender equity.
- ❑ Adolescents can be entrusted to gradually take on adult responsibilities;
 - participation in decisions that affect their lives
 - making contributions to their families and communities.
 - communication with parents/other adults

Interventions

- ❑ Overall development of adolescents can be improved by meeting basic needs for safety, belonging and self-esteem as well as mastering key skills for living
- ❑ This enables them to avoid health risks, and provide motivation to practice healthy behaviours.
- ❑ Important to take into account that adolescents are not a homogenous group, thus;
 - interventions and method of delivery vary according to differing needs and circumstances.
 - special needs e.g. disabled, chronic disorders, out-of-school, OVCs (immigrants, displaced/refugees, step-children, homeless etc)

Human, Sexual and RH and Rights

- Impetus and direction for increased action for adolescent health come from many sources
- The basic rights and obligations related to the promotion and protection of the health of adolescents are articulated in;
 - the United Nations Convention on the Rights of the Child
 - Convention on the Elimination of All Forms of Discrimination against Women.
 - International conferences and statements such as the 1994 International Conference on Population and Development (ICPD), ICPD+5, ICPD +10, the 1995 Fourth World Conference on Women and the United Nations World Programme of Action for Youth to the Year 2000 and Beyond.

Rights

- Measures to support, stimulate and strengthen national laws, policies and programming for adolescent health have been adopted by WHO, UNFPA and UNICEF.
- Kenya
 - Adolescent Reproductive Health and Development Policy, 2003
 - Plan of Action
 - YFS Guidelines

Controversies

- Sexuality education
- Legalization of abortion
- Acceptance of homosexuality?
- Cultural dynamics
 - Rites of passage
 - Influence by media, internet etc
 - Religion

Conclusion

- ❑ Adolescence offers a unique opportunity for health promotion and prevention
- ❑ Interrelated needs
- ❑ Multidisciplinary approach to care to offer one-stop shop
- ❑ Youth-friendly services increase utilization of services
- ❑ Youth-friendliness does not mean that new facilities must be constructed

Thank You