



Research Paper

Why must adolescent health be? A call for refocusing healthcare services for the Youth

Wilson Zimba

Public Health Unit, Mulungushi University School of Medicine and Health Sciences, Livingstone, Zambia
Corresponding Author: Wilson Zimba

ABSTRACT : *The predominant causes of morbidity and mortality in adolescence are unique to this group and hence require appropriately innovative health interventions. The quests for innovation arise from the exceptional developmental characteristics of this group necessitating that the nature and packaging of the health services provided be different and responsive to their special circumstances. A package of youth friendly health services aligned to youth needs and idiosyncrasies should aim to galvanise health seeking behaviours among adolescents. In Zambia, there is a growing realisation that adolescent health is neglected and deserving a special place in the healthcare system – notwithstanding that adolescents account for over a quarter (27%) of the total population, and are highly affected by health problems specifically associated with adolescence such as HIV and AIDS, rape and sexual abuse, teenage pregnancies, drugs and alcohol abuse, etc. Such are the typical health conditions the adolescents are unlikely to disclose in a health care environment designed for adults. In Zambia, there is a government policy for all clinicians and staff to be trained in the best practices in adolescent friendly health services. This is yet to be mainstreamed in the overall national health services. This paper has attempted to discuss peculiarities of adolescence and why adolescent health must be.*

KEYWORDS: Adolescent Health, A Call for Refocusing Healthcare Services, Youth

Received 12 May, 2022; Revised 24 May, 2022; Accepted 26 May, 2022 © The author(s) 2022.

Published with open access at www.questjournals.org

I. INTRODUCTION

Let us open the discussion with a quote from Cobb [1]:

'It is clear that [an adolescent] is no longer a child but is it clear that he is an adult? ... adolescents emerge as individuals who are neither self-sufficient, and hence not adult, nor completely dependent, and thus not children.'

Indeed, in many legal jurisdictions, including Zambia, being dubbed a child in one vein and an adult in another is a common dilemma. In Zambia, it is not illegal to marry a girl who has just turned 16 years; but she cannot vote until she is 18 years. Yes, she can be a worthy wife with children of her own before 18 years but she cannot acquire a license to drive a car until after her 18th birthday. Yes, she can vote at 18 years but she cannot contest in the same election to be a member of parliament until she is 21 years old. There is nothing barring her to assume any high position in commerce or diplomatic services either before 21 years of age but not be a member of parliament. Do these contradictions pose a dilemma to the youth (or adolescents)? Possibly not! These legal contradictions are not even unusual and may actually pose little harm to the youth's wellbeing.

On the other hand, the fact that adolescents are physically and psychologically neither children nor adults does pose special health implications. Physically they are a continuation of childhood because of the unfolding growth and development. Of all changes that happen to this child, biological and physical changes are the most universally-defining characteristics that differentiate him/her from the child that s/he was not long previously [1]. Puberty is key development in the unfolding changes that this child faces. The development transforms the child quite literary into a sexually and physically mature adult. Behind this metamorphosis is a cocktail of hormones whose excretion builds up dramatically in this stage of the child's development [1].

During puberty, the production of growth hormone doubles, resulting in the gain of significant percentage of the final adult height [2]. In addition, there is increased production of sex hormones, namely Follicle Stimulating Hormones (FSH) and Luteinizing Hormone (LH) produced by pituitary gland that are responsible for puberty and developments in reproductive systems of boys and girls [3, 1]. FSH and LH in turn

stimulate steroid hormones oestrogen and progesterone. What puberty entails is development of a host of biological, physical/physiological and psychological changes that are unique to this age. Between ages 8 and 14 years and 10 and 16 years [3] for girls and boys respectively, there is accelerated physical growth – sometimes referred to as physical growth spurt [1]. This growth in height is accompanied by noticeable gain in weight and bulging muscles. Proportional body-build changes too: widening of hips for girls and broadening of shoulders for boys become all noticeable [1].

This is accompanied by changes in the reproductive system and emergence of secondary sex characteristics [1]. Appearance of pubic hair happens to both girls and boys during puberty accompanied by growth of breasts, uterus and vagina for girls and enlargement of testes and scrota for boys. Somewhere mid-way in the unfolding puberty, (which may extend up to 4 years [1]) girls begin to menstruate and boys begin to ejaculate. These will culminate into adult-looking and sexually functioning adolescents with fully blown secondary sex characteristics: for example, fully grown breasts in girls and ‘sprouting’ of beards for boys.

Psychologically, puberty comes with it what Cobb referred to as ‘...an inner world of sexual stirrings’ [1, p. 10] – intense attraction to appropriate sexual objects and heightened sexual seeking behaviours such as perusing pornographic materials.

The other significant development of adolescence is self-introspection about what *self* means to the individual and those surrounding him/her. Thus, accompanying dramatic bodily changes are cognitive developments - adolescents developing a new awareness of themselves and concern of how others perceive them. They begin to gain a sense of self; thinking about themselves the same way they might think of others [4]. They start judging their thoughts and actions as they perceive others would judge them. Parents and relevant others expect a new maturity from them – to be more adult [1, p. 10]. In this development, cultural norms and expectations come into play arising from and transmitted by how adolescents feel others see them [1]. The children eventually learn what is expected of them not just by one other person but by a whole group, what Mead referred to as “faceless person out there” [4]. In that way, they internalize the expectations and value systems of the group to which they belong.

A further significant development of adolescence is the emergence of individuation and emotional autonomy symbolized by keeping secrets from parents [1] [5]. This development entails that adolescent relinquish the safe haven of childhood and parental protection and in its place choose to exercise self-regulation and responsibilities as they march toward adulthood [1] [5]. The end-goal is to establish and consolidate their capacities for self-determination and independence away from parents and adult authority. In so doing, adolescents increasingly rely for support less and less on their parents than they do their friends and peers. Thus, while adults consider this development negative and dysfunctional, secrecy has been found to contribute to adolescents’ development and exercise of emotional autonomy. When adolescents control what they reveal and what they conceal, they are building their sense of independence [5]. According to Finkenauer et al [5], to be able to keep a secret from parents, the adolescent requires to exert self-control and personal choice, applications of which are considered indicators of development of self and autonomy. In this context, self-control requires restraining oneself from involuntarily divulging the secret while self-choice pertains to secret-keepers’ deliberate choice of whether or not to reveal the secret to others. Thus, secrecy contributes to the process of enhancing individuation among children and adolescents [5, 1].

II. HEALTH CONCERNS OF ADOLESCENTS

Sexual and Reproductive Health

Earlier in the discussion, we mentioned that puberty comes with intense craving for sexual intercourse with a culturally appropriate sexual object, usually individuals of the opposite sex. Sexuality looms large in the psyche of adolescents to the extent that it becomes a barometer of one’s self-worth [1]. For example, to what extent does one perceive the self to be bodily attractive to desirable suitors? Or indeed how well does one boy feel he compares in sexual prowess with others of the same age?

The implication may be that sexuality is a contributor to adolescents’ feelings of self-worth or strivings for the ideal-self. According to Buzwell and Rosenthal [6], to an adolescent, there is such a thing as *sexual self-esteem*, the measure of one’s sexual appeal to potential sexual partners and one’s level of confidence to respond appropriately in a sexual situation. Buzwell and Rosenthal’s study suggests that the younger the adolescent, the lower the sexual self-esteem tends to be. But as they grow older, they tend to also assume a more assertive sexual self-esteem and with it the openness to sexual experimentation. Also along this growth path is an emergence of *sexual self-efficacy* underpinned by growing confidence in one’s ability to control outcomes in sexual situations. Buzwell and Rosenthal further espouse a theory that the sex self-esteem goes through stages, from what they refer to as *sexually naïve* to *sexually adventurous* or *sexually driven*. The stages relate to how open and confident the adolescent gets in a sex situation as s/he grows older and more experienced. Thus, as they progress in age, adolescent also tend to be more open to taking greater risks in sexual situations and willing to get involved with more sexual partners. This inadvertently means exposure to higher risks of sexually

transmitted diseases and unintended pregnancies. Consequently, in the discourse of adolescent and sex, there is an emerging emphasis on sex as a risk to health and the need to build competences at protecting adolescents from the dangers of casual sex [1, 7].

Most health concerns surrounding adolescent sex arise from the risk of contracting sexually transmitted infections especially HIV, syphilis and gonorrhoea. In Zambia, the health concerns for adolescents arise due to the fact that more than 50% of the population is under the age of 20 years and that adolescents continue to constitute the core vulnerable group to STI/HIV/AIDS pandemic [8]. An official government report shows that those aged 15 to 19 years are five times more likely to be infected with HIV in Zambia than other age groups, more so for females than males [8]. Thus, HIV is an enormous threat to the health wellbeing of adolescents in Zambia and the situation is compounded by high rates of child sexual abuse cases targeted at girls. In a study conducted in Lusaka in 2013, it was found that there were high levels of sexual abuse of girls in the City, about 65% of them between ages 11 – 15 years [9]. Such abuses might explain the high HIV infection rates among girls aged 15 to 19 years in the Country.

Notwithstanding such statistics, generally many adolescents harbour a strong sense of invulnerability against contracting HIV and other STIs - the basic misconception that they have control over risks of unprotected sexual engagements [1, 7]. And yet, as Ogden points out, protective sexual behaviour is directly related to adolescents' level of anxiety regarding sex and engendering an appropriate perception of susceptibility to contracting STI/HIV/AIDS in sex situations [7].

Adolescents and Addictive psychoactive substances

Adolescence is that stage in one's life when one is apt to experiment with many things that they observe others do. Similarly, adolescents will partake of this or that mind- and mood-altering substance available in their environment; by doing so, adolescents feel more adult [1]. Advertisements don't make matters any more tempting for adolescents by portraying those who partake of legal psychoactive substances as glamorous. Unfortunately, like sex, with the tendency to experiment with psychoactive substances comes health and behavioural risks.

Substance-related disorders are a major health concern especially for adolescents. They arise from the adolescent ingesting substances with the aim of altering the way they think, feel or behave [6]. Substance abuse is a concern at personal, familial and social levels; it affects how adolescents live their lives, play and the extent to which they comply with social rules. Common mood-or-behavioural altering substances include alcohol, nicotine, caffeine, cocaine, heroin, marijuana or such. These are referred to as psychoactive substances because they are taken for the primary purpose of altering mood or behaviour [10,7].

By the use of psychoactive substances, what adolescents are courting are risks for intoxication, abuse, addiction and dependence on those substances [1, 7, 10, 11]. Intoxication is when maladaptive behaviour results from ingestion of a substance so that one's judgement, mood and motor abilities are altered away from the normal [7]. Intoxicated individuals are prone to incoordination and nystagmus, the latter causing the substance user to misjudge stimuli. Insofar as mood changes are concerned, for example, temporary euphoria is a common outcome of ingestion of psychoactive substances including alcohol and inhalants [8]. Traffic police officers at times determine the amount of alcohol taken by a driver by making them undertake an otherwise easy motor activity such as to walk straight along a narrow pavement and judge alcohol taken from incoordination. Motor crashes due to alcohol abuse frequently happen out of this motor impairment. Thus, substance intoxication is the driver for taking psychoactive substances but is also the first public health issue that arises therefor. The level of intoxication depends upon the type and amount of psychoactive substance taken and one's biological reaction to the substance [11]. Substance users react remarkably different to the same type and amount of drug taken – some people stagger upon taking alcohol but others hardly show any sign of motor impairment from the same amount [10].

Figure 1: Dangers of alcohol impairment

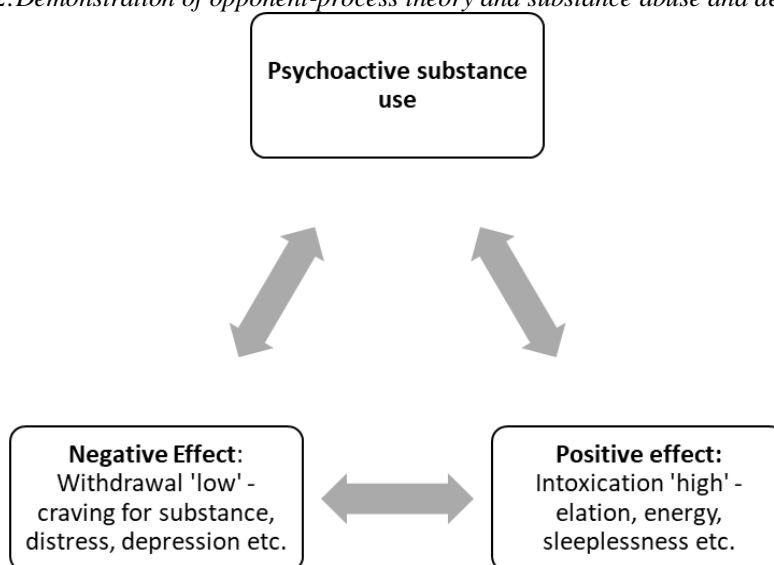


<https://slideplayer.com/slide/6864884/23/image/s/8/How+You+Are+Affected+Alcohol+weakens+a+person%E2%80%99s+inhibitions..jpg>

Being immune to intoxication upon taking a psychoactive substance is referred to as *tolerance* to that substance. Because of repeated use of the substance, the body gets tolerant or immune to it [10]. Normal cognitive, motor and behavioural reactions to alcohol or other psychoactive substances get weakened with more and more frequent use. Once an individual develops tolerance to a particular psychoactive substance, they quite often require substantially greater amounts of the substance to experience the same intoxication. Without use of the substance, they often experience illness-like symptoms referred to as withdrawal [7, 10, 1]. Withdrawal symptoms, along with tolerance, are the physiological reactions to a particular substance [7]. In the case of alcohol, withdrawal might be marked by sweating, nausea, tremors and anxiety [8]; in extreme cases, alcohol withdrawal *delirium* might occur in which case the abuser might suffer frightening hallucinations and body tremors [7]. Because withdrawal symptoms can get so severe, the affected adolescent will be driven to the psychoactive substance just to avoid or overcome them [10] – a form of negative reinforcement whereby a substance is ingested for the sole benefit of alleviating an aversive effect of the psychoactive substance [10,11]. Thus, both the ‘highs’ and ‘lows’ accruing from ingesting the substance motivate and maintain the substance usage [11].

Schwartz [11] uses **opponent-process theory** to explain how psychoactive substances get to a point where the user loses control and is propelled into abyss of destructive habits to meet the demands of the substance. Because of the shifting experiences of highs and lows, affected adolescents require increasing amounts of the stuff to produce the desired highs. When the substance wears off, the person experiences withdrawal symptoms, including intense craving for the substance. Any environmental cue can set-off the craving – an arrival of a friend associated with the substance, sight of money as the currency of exchange in the acquisition of the substance *etc.* The craving along with any other withdrawal symptom will not subside until the drug is ingested again. Although the substance eventually diminishes its potency to produce similar highs, it will nonetheless continue to cause withdrawal in form of crashes – painful withdrawal symptoms. To avoid or heal these painful symptoms, the user ingests the substance again and the cycle goes on.

Figure 2: Demonstration of opponent-process theory and substance abuse and dependence



At the point where craving for the substance to achieve either the ‘high’ or overcome the ‘low’ starts to drive its use, we are at the stage of **substance abuse** and **substance dependence**. DSM-IV-TR defines abuse in terms of how significantly the substance interferes with one’s control on daily life and functionality [6]. For example, to what extent does drinking alcohol dominate one’s daily life and disrupts one’s school efforts? Does our adolescent skip classes to dedicate time

Figure 3: DSM-IV on Substance Abuse

Substance Abuse

Substance abuse involves maladaptive pattern of substance use, although not outright dependence, leading to clinically significant impairment or distress as evidenced by one or more of the during a 1-year period:

- Recurrent substance use causing a failure to fulfill work, school or family obligations
- Recurrent substance use in situations where it is physically hazardous (e.g., driving),
- Recurrent legal problems related to substance use
- Continued substance use despite having persistent or recurring social or interpersonal problems caused or made worse by the use of the substance

and other resources to catch a drink or two just to get that 'high' or overcome those embarrassing morning tremors? DSM-IV defines substance abuse as a recurring pattern of behavioural difficulties and dysfunctions related to indulgence in a psychoactive substance [7].

An adolescent is in a stage of substance dependence when ingestion of the substance starts to '*control one's behaviour in such a way that one is no longer free to not to use it*' [1:406]. In this case, without that drink the abuser catches the 'crash' because of past indulgences in the alcohol substance. And to overcome or avoid the crash and the pain of it, the abuser needs to keep indulging. As a defining characteristic of substance dependence, DSM-IV points out that the abuser will portray a significant reduction or avoidance of social, work-related or recreational activities due to substance use; in case of adolescents, the avoidance could just happen to be school work.

World over, especially in low- and mid-income countries, Sub-Saharan Africa included, use and abuse of psychotropic substances is a major health concern especially so among adolescents [13]. In Zambia for example, Swahn et al reports that 40.8% of adolescents had ever taken alcohol, more so for girls (45.2%) than boys (36.7%) [13]. It is noted that alcohol use, for example, is a serious underlying factor for chronic diseases and injuries across the world [13]. Globally, WHO estimates that alcohol causes 1.8 million deaths annually or 3.2% of all deaths and accounts for 4.0% of the disease burden [13]. Generally, research literature indicates that alcohol use is associated with alcohol dependence, a driver for use of other psychoactive substances, criminal activity, unintentional injuries due to motor dysfunction, involvement in physical fights, suicidal ideation and attempts, and risk of human immunodeficiency diseases [10, 11]. Even more importantly, as implied by Kandel's *gateway hypothesis*, adolescents who use alcohol tend to progressively graduate from minor drinking to other, may be more lethal drugs such as cocaine [1]. Unfortunately, as Ogden [11] points out, men aged between 16 to 24 drink the most - the age bracket within which most adolescents fall. She also reports that this age group more than any other, usually drink more than twice the legally recommended amount of alcohol. Thus, the contribution that alcohol use makes to morbidity and mortality in this age group is astronomical.

In summary, alcohol is the number one public health concern worldwide even by sheer number of users that runs into millions across various individual countries [14]. Some scholars estimate that alcohol accounts for between 25% and 40% of hospitalisations in some countries such as the USA [14]. Alcohol is strongly implicated in the development of liver and pancreatic disease, malnutrition, Korsakoff's syndrome, heart disease, bone loss, general gastrointestinal problems *etc.* Those medical conditions are dwarfed by mental health costs of alcohol. According to James and Gilliland [14], most assaults and murders are attributed to alcohol use - weather directly or indirectly. Longtime suicide rates are astronomically higher among alcoholics than non-alcohol users [14]. In other words, alcohol, while generally not considered a psychoactive substance by mainstream citizens, has far reaching and widespread mental health dysfunctional effects than any other psychoactive substance [14].

Tobacco smoking is a worldwide health concern [13], causing poverty, several illnesses and death [13]. Insofar as adolescents are concerned, Zulu *et al* pinpoint the age of initiation of smoking as adolescence [15]. Ogden, on the other hand, asserts that data are ambivalent on the age of initiation but that it certainly lies in between childhood and adolescence [7]. Significantly, research evidence indicates that most of adolescents become regular smokers by the time they reach senior secondary school [1]. Be that as it may, reports are that smoking initiated in childhood (or adolescence) stands a higher chance of precipitating the development of lung cancer compared with one that starts in adulthood [7]. In terms of gravity of the smoking problem, it was estimated that with smokers of average age of between 15 and 19, the prevalence rate of male smokers was found to be 20.4% and 0.5% among women [16]. A significant finding by Nanyinza *et al* was also that the incidence rates positively correlate with increase in age of the smoker [16].

So what is it about cigarettes that should worry public health advocates? The primary psychoactive ingredient in cigarettes is nicotine which acts both as a stimulant [1, 11] and depressant [1]. Consequent to that physiological effect, upon consuming nicotine, smokers experience concurrently improved alertness and relaxation [1]. The downside to frequent inhalation of nicotine is increased risk of heart disease resulting from its excitatory effect on heart rate, breathing, constricted blood and ultimately blood pressure [11,1]. As generally acknowledged, tobacco smoking (not necessarily due to nicotine but other ingredients of tobacco smoke such as carbon monoxide) increases the risk of lung cancer and respiratory infections including chronic bronchitis and emphysema [1, 11]. For those pregnant adolescents, smoking may increase the risk of prematurity, low birth weight, spontaneous abortions and other prenatal problems [1].

While cigarette manufacturers and some scientists continue to express skepticism about the tobacco-illness link, empirical studies into the link are getting more and more emphatic [11]. Perhaps the most important study is the famous 1948 Framingham Heart Study that implicated smoking as a risk factor for heart disease. Subsequent studies found evidence of this link to other conditions such as strokes, chronic bronchitis and emphysema, stomach ulcers and other diseases of the mouth [8]. Several pieces of research evidence render credence to the tobacco-illness link hypothesis [11].

Table 1: Quitting cigarette smoking and improvement in health conditions, courtesy of Schwartz [11, p. 243]

No. of years following one quitting cigarette smoking	Risk to specific illnesses
1	About 50% drop risk in coronary heart disease
2 years or more	50% drop in risk to bladder cancer
5	50% drop in oral and esophageal cancer
5 – 15	Risk to strokes comparable to lifetime non-smokers
10	30-50% drop in lung cancer
15	Risk to heart disease synonymous with lifetime non-smokers.

Further research evidence indicates that at work places, smokers are more likely to be absent due to illness than non-smokers. One can deduce from such findings that smoking is a precursor to unstable future careers for those adolescents who smoke compared to those who don't indulge, even if currently ill-health isn't evident and disrupting to school and other worthy preoccupations for such adolescents. In essence, more and more pieces of evidence are pointing to ill-health outcomes for cigarette smokers. According to Ogden [7], generally cigarette smokers' health conditions tend to be more unsatisfactory than for non-smokers. She quotes reports that suggest that out of 1,000 smokers, 250 are said to die from cigarettes by middle age and another 250 will die from it in old age. Additionally, on average, smokers are likely to die 8 years earlier than non-smokers and may suffer morbidity 12 years earlier than is normal for non-smokers.

III. HEALTH SERVICES AND THE ADOLESCENTS

One can place blame of adolescents' neglect of seeking help for sexual and mental health services at the doorstep of the nature of packaging of healthcare services in general. Health services targeted at the youth must fit in with adolescence mentality. It has already been demonstrated in this discussion that adolescents are at the core of sexually transmitted illnesses, unwanted pregnancies and mental health disorders largely due to abuse of psychoactive substances. Research evidence generally shows that adolescence constitutes the most neglected age group and adolescents are unlikely to seek out medical and mental health services. To that end, much research shows that adolescents do not use sexual and reproductive health services for STIs and contraception [7].

Most healthcare institutions are found unsuitable for adolescents. Because staff are not specially trained in rendering health services to adolescents, they pose a judgmental and unhelpful demeanor [7]. Because most healthcare institutions require clients to provide personal details, adolescents fear unwarranted access to their personal data and revelations about sexual or a mental health service they might have sought. This perception that formal healthcare services lack confidentiality doesn't sit well with the secret nature of adolescents as mentioned earlier in the discussion. All-in-all, healthcare services appropriate for adolescents must be user friendly, non-judgmental, accessible, approachable and confidential [7]. Appropriateness of healthcare services cover things like convenient opening times, discrete location of the operational rooms that enhance confidentiality *etc.*

Such services are a far cry in the Zambian, mostly government rendered health service-facilities. In one vein, adolescents are provided for under paediatric health services, which are not dispensing contraceptive care and prevention and treatment of STIs. In the other vein, adolescents are considered adults but socially excluded from certain services concerned with sexuality, reproductive and sexual health. For example, because of the misconception that adolescents do not indulge in sex for being unmarried, they do not demand contraceptives and HIV/STI prevention services, thereby languish under the burdens of medical and mental health conditions which are otherwise preventable or curable.

IV. ADOLESCENT FRIENDLY HEALTH SERVICES

In this discussion an attempt has been made to present adolescence as a unique age group. In many countries, Zambia particularly, they comprise disproportionately large age sector. If society can embrace adolescence as different age sector afloat with peculiar developmental, biological, sociological and psychological challenges neither shared with pre-teen children nor grown-ups, then adolescent health emerges as genuine and deserving a special set-up in health service governance and systems.

We started off in this discussion by presenting biological changes that at the very least are daunting to any individual child. Puberty, while taken for granted, is a phenomenon that children may not be prepared for. Biologically and physically, the child is facing phenomenal changes – overwhelmed by hormones accompanied by drastic changes to their biological and psychological outlook. All at the same time, special psycho-social developments kick in that put them at variance, if in conflict, with adults and parents. One such milestone that engenders conflict with parents and adult fraternity in general is the emergence of *individuation and emotional autonomy* symbolized by among other developments, keeping secrets from parents [1] [5]. Emotional autonomy entails a special drive for confidentiality against the prying eyes and ears of adults including healthcare providers.

Yet, adolescents have physical characteristics they share with adults. Especially in late teens, their bodies function synonymously with those of adults especially pertaining to sexual desires and wanting to belong to a community they get most comfort from – their peers. After all, adolescence is a stage in one's life when we are apt to experiment with many things least in sexual engagements and use of psychoactive substances. As we tried to show in this paper, with the tendency for experimentation comes health and behavioural risks and the inevitable need for appropriate healthcare services.

Sexual health challenges are highly pronounced among adolescents. We noted in the discussion government's estimate that in Zambia, adolescents are five times more likely to contract HIV and other sexually transmitted illnesses than the adult population. We further noted that adolescents constitute the core users of psychoactive substances disregarding the risks of injuries and chronic diseases underlying their use.

Adolescence underpinned by autonomy and secrecy entails that health seeking behaviours are at the very least different from those of the adult population. They want services that are user-friendly to them – that fit their mentality. In many health service jurisdictions, various special categories aimed at special groups exist: children and paediatric clinics, safe motherhood clinics *etc.* In Zambia, adolescent health is in its infancy and tragically downplayed.

That does not mean plans are not underway at multilateral and national levels. WHO [17] has developed various tools to aid authorities and individual healthcare staff to mainstream adolescent health [17]. Such tools include publications as 1) *Making health services adolescent friendly: Developing national quality standards for adolescent-friendly health services*, 2) *Quality Assessment Guidebook: A guide to assessing health services for adolescent clients* and 3) *Strengthening the health sector's response to adolescent health and development*. The first aims, among various others goals, to provide guidance for identifying what actions need to be taken and to assess whether appropriate standards have been achieved. *Quality Assessment Guidebook* aims to aid national and institutional planners and actors to standardize and scale up the coverage of quality health services to adolescents, as set-out in *Strengthening the health sector's response to adolescent health and development*.

At national level, the Government of Zambia has developed what is titled *National Standards and Guidelines for Adolescent Friendly Health Services* [18]. The document lists priority health issues namely, sexual and reproductive health, nutrition and health styles, drug and alcohol use, and violence and mental health. Further, health facilities are expected to adhere to nationally agreed standards in the provision of adolescent health friendly health services on each of the priority concerns. Among the most important requirement is that all clinicians, counsellors, peer-educators and other players in the health sector be trained in adolescent and youth friendly health services. Largely these trainings are yet to commence, least upscaled. This is a call to action for all medical schools in Zambia and across Africa.

REFERENCES

- [1]. Cobby, N. J. (2007). *Adolescence: continuity, change and diversity*, Boston, McGrawhill.
- [2]. Saenger P. (2003). Dose effects of growth hormone during puberty. *Horm Res.* 60(Suppl 1):52-7. doi: 10.1159/000071226. PMID: 12955018., <https://doi.org/10.1159/000071226>
- [3]. Craley, E. (Nov., 20210). Puberty. *Teachme Physiology*: <https://teachmephysiology.com/reproductive-system/development-maturation/puberty/> Downloaded 21 March, 2022.
- [4]. <https://www.yourarticlelibrary.com/sociology/socialisation-the-meaning-features-types-stages-and-importance/8529>, Downloaded 21 March, 2022.
- [5]. Finkenauer, c., Engels, R. C. M. E. & Meeus, W. (2002). Keeping Secrets From Parents: Advantages and Disadvantages of Secrecy in Adolescence, *Journal of Youth and Adolescence*, Vol. 31, No. 2, April 2002, pp. 123–136. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.922.7068&rep=rep1&type=pdf> . Downloaded 4 May, 2022.
- [6]. Buzwell, S. & Rosenthal, D. (1996). Constructing a sexual self: Adolescents' sexual self-perceptions and sexual risk taking. *Journal of Research on Adolescence*, 6, 489 –513. https://www.researchgate.net/publication/234631265_Constructing_a_Sexual_Self_Adolescents'_Sexual_Self-Perceptions_and_Sexual_Risk-Taking. Downloaded 4 May, 2022.
- [7]. Ogden, J. (2012). *Health Psychology: A Text Book*. London: McGraw hill
- [8]. Ministry of Health (2002). National HIV/AIDS/STI/TB Policy. <http://www.ilo.org/dyn/natlex/docs/ELECTRONIC/70234/69641/F2086732391/ZMB70234.pdf>. Downloaded 5 May 2022.
- [9]. Zimba, W. (19914). The Unacknowledged Cost of Child Sexual Abuse: Psychological experiences of guardians of survivors of sexually abused children in Lusaka, Zambia.
- [10]. Durand, V. M. and Barlow, D. H. (2006). *Essentials of Abnormal Psychology* (4th Ed.). Bement, CA: Thomson Wadsworth.
- [11]. Schwartz, S. (2000). *Abnormal Psychology: A discovery Approach*. Mountain View: Mayfield Publishing
- [12]. Addiction Centre: Your guide to addiction and recovery (April 1, 2022). <https://www.addictioncenter.com/community/positive-negative-reinforcement/>. Downloaded 1 April, 2022.
- [13]. Swahn, M. H., Ali, B., Palmier, J. B., Sikazwe, G., & Mayeya J. (2011). Alcohol Marketing, Drunkenness, and Problem Drinking among Zambian Youth: Findings from the 2004 Global School-Based Student Health Survey. *Journal of Environmental and Public Health*, Volume 2011 |Article ID 497827 | <https://doi.org/10.1155/2011/497827>, Downloaded on 23 March, 2022.
- [14]. James, R. K. & Gilliland, B. E. (2001). *Crisis Intervention Strategies*, Belmont, Brook/Cole
- [15]. Zulu, R., Siziya S. Nzala, S. H. (2008). Tobacco smoking prevalence among in-school adolescents aged 13-15 years: baseline for evaluation of the implementation of the FCTC in Lusaka district, Zambia, *Medical Journal of Zambia* , Vol. 35 No. 3 (2008). <https://doi.org/10.4314/mjz.v35i3.46527>. Downloaded 23 March, 2022.

- [16]. Muyinza, F. N., Olowski, P., & Michelo, C. (2020). Tobacco smoking prevalent in Zambian males: Observations from the Zambia Demographic Health Survey 2013-2014, *Medical Journal of Zambia*, Vol. 47 (3): 179 – 187, <https://www.ajol.info/index.php/mjz/article/view/205156/193461>. Downloaded 23 March, 2022.
- [17]. WHO (2012). Making health services adolescent friendly: Developing national standards for adolescent-friendly health services. Making Health services adolescent friendly by WHO.pdf. Down loaded on 9 May, 2022.
- [18]. Ministry of Community Development, Mother and Child Health. National Standards and Guidelines for Adolescent Friendly Health Services, *National-Standards-and-Guidelines-for-Youth-Friendly-Health-Services.pdf*. Downloaded 9 May, 2022.