TOWARDS TOBACCO-FREE YOUNG PEOPLE IN THE AFRICAN REGION
The majority of smokers begin using tobacco products well before the age of 18 years. Young people often underestimate the risks of tobacco and the likelihood of becoming addicted to it. The younger children/teenagers/adolescents are, when they first start using tobacco, the more likely it is they would become regular users; and chances are that they would eventually get hooked, if measures are not taken to rescue them.

Among young people, short-term health consequences of using tobacco include respiratory and non-respiratory effects, addiction to nicotine, and the associated risk of using hard drugs. Long-term health consequences of tobacco indulgence by the youth are reinforced by the fact that most young people who smoke regularly continue to smoke throughout adulthood.

In order to reduce tobacco use by young people, a range of deterrent measures will be necessary. One key approach will be to denormalize tobacco use in the general population. The tobacco industry has systematically resisted measures that have been proven globally to reduce tobacco use among young people and the general population. These include increasing tobacco prices and taxes, implementing smoke-free policies and banning all forms of tobacco advertising, promotion and sponsorship. Article 16 of the WHO Framework Convention on Tobacco Control (WHO FCTC) requires that countries adopt and implement measures to prohibit the sale of tobacco products to and by persons under 18 [1], or any other age set by law.

This document highlights the burden of tobacco use, health risks and prevention measures with a view to improving access by young people to accurate information on tobacco. The information presented in this document is useful to young people, parents, educators, and all tobacco control advocates in the African Region in order to prevent young people from starting tobacco use, and to protect them from exposure to second-hand smoke.

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Approximately one person dies every six seconds due to tobacco, accounting for one in 10 adult deaths. Up to half of current tobacco users will eventually die of a tobacco-related disease. In fact, tobacco accounts for more than 6 million deaths every year, including over 600,000 deaths from exposure to second-hand smoke [2]. Nearly 80% of these deaths occur in low- and middle-income countries (LMICs). Between 2002 and 2030, tobacco-attributable deaths are projected to decline by 9% in high-income countries but are expected to double from 3.4 to 6.8 million in LMICs [3]. On the basis of current global tobacco use patterns projecting about 50% of young men and 10% of young women becoming smokers, with relatively few of them stopping, the annual tobacco-attributable deaths will increase progressively and reach about 10 million in few decades [4].

Tobacco use has so far received inadequate attention in the African Region. The perceived low-smoking prevalence in the Region, in relation to the high-smoking prevalence in other regions, alongside the more immediate and pressing need for interventions, with respect to infectious diseases, has resulted in a low priority for tobacco control in Africa. However, relatively improved health conditions and economic growth in some countries has resulted in increased number of tobacco users in the Region. Therefore, Africa presents today the greatest threat in terms of future growth in tobacco use.

In 2013, the World Health Assembly called on governments to reduce by 30% the prevalence of tobacco use by 2025, in order to avoid more than 200 million tobacco-related deaths during the remainder of the century. WHO has also called on countries to reduce by 25% the probability of dying from noncommunicable diseases by 2025 [5]. Cessation of tobacco use is one of the most important ways to help achieve this goal. As for tobacco use among young people, WHO encourages countries to help keep the youth tobacco-free and continue to help those who start using tobacco to quit the habit.
**SMOKED TOBACCO PRODUCTS**

- **Manufactured cigarettes** are the most commonly consumed tobacco products worldwide. They consist of shredded or reconstituted tobacco, processed with hundreds of chemicals and various flavors such as menthol, and are placed in a paper-wrapped cylinder. Usually tipped with a filter, they are lit at one end and inhaled through the other.

- **Cigars** are made of air-cured and fermented tobacco leaves. The aging and fermentation process produces high concentrations of carcinogenic compounds. The concentrations of toxins and irritants in cigars are higher than in cigarettes. Cigars come in many shapes and sizes, from cigarette-sized cigarillos, double coronas, cheroots, stumps, churchills, and chumitas. In reverse chutta and chumti smoking, the ignited end is placed inside the mouth.

- **Roll-your-own (RYO) cigarettes** are cigarettes hand-rolled by the smoker, from fine-cut loose tobacco and a cigarette paper. RYO cigarette smokers are exposed to high concentrations of tobacco particulates, tar, nicotine, and carcinogens.

- **Waterpipes**, also known as shisha, hookah, nargile, or hubble-bubble, operate by water filtration and indirect heat. Flavored tobacco is burned in a smoking bowl covered with foil and coal. The smoke is cooled by filtration through a basin of water and consumed through a hose and mouthpiece.

- **Pipes** are made of briar, slate, clay, or other substances. Tobacco is placed in the bowl, and the smoke is inhaled through the stem. In South-East Asia, clay pipes known as sulpa, chillum, and hookah are widely used.

- **Electronic cigarette (or e-cigarette)**, electronic vaping device, personal vaporizer (PV), or electronic nicotine delivery system (ENDS) are electronic inhalers meant to simulate and substitute for tobacco smoking. They generally use a heating element that vaporizes a liquid solution. Some release nicotine, while some merely release flavored vapor. They are often designed to mimic traditional smoking implements, such as cigarettes or cigars.

**SMOKELESS TOBACCO PRODUCTS**

- **Chewing tobacco** products are placed in the mouth, cheek, or inner lip and sucked or chewed, or, in the case of tobacco pastes or powders, placed on the gums or teeth.

- **Dry snuff** is powdered tobacco that is inhaled through the nose or taken orally.

- **Moist snuff** consists of ground tobacco held in the mouth between the cheek and gum. Manufacturers are increasingly packaging moist snuff into small paper or cloth packets to make the product more convenient.

- **Dissolvable smokeless tobacco** products contain tobacco and numerous added constituents. They dissolve in the mouth and deliver nicotine to the user via mucosal absorption. They are often brand extensions of well-known cigarette brands. These newest oral smokeless tobacco products are developed for use by smokers in any situation where they cannot or choose not to smoke.
TOBACCO USE AND HEALTH RISKS

Tobacco use and increased health risks

Tobacco users are more likely than non-users to develop disease and die prematurely. Indeed, many of the chemicals in cigarettes, such as nicotine and cyanide, are actually poisons that can, in high enough doses, cause diseases and kill. The consequences of tobacco poisoning are felt gradually, while its use causes health problems resulting in increased absenteeism from work, and increased health-care utilization and cost. Tobacco use includes smoked tobacco, smokeless tobacco and exposure to second-hand smoke.

Tobacco smoke contains chemicals that are harmful to both smokers and non-smokers. Tobacco smoke contains more than 4000 chemicals, of which at least 250 are known to be harmful including carbon monoxide and ammonia. More than 50 of these, such as arsenic, benzene, beryllium (a toxic metal), butane (a hazardous gas), cadmium (a toxic metal), chromium (a metallic element), ethylene oxide, nickel (a metallic element), polonium-210 (a radioactive chemical element) and vinyl chloride, are known to cause cancer.

Nicotine in tobacco products is a highly addictive drug, as addictive as heroin or cocaine. Nicotine acts on the brain to produce a number of effects. Nicotine activates reward pathways in the brain and produces the feeling of pleasure. A key brain chemical involved in mediating the desire to consume drugs is the neurotransmitter dopamine, and nicotine increases levels of dopamine in the brain. Long-term brain changes, induced by continued nicotine exposure, result in addiction. The pharmacokinetic properties of nicotine also enhance its abuse potential. Cigarette smoking produces a rapid distribution of nicotine to the brain, with drug levels peaking within 10 seconds of inhalation. However, the acute effects of nicotine dissipate quickly, as do the associated feeling of reward, which causes the smoker to continue dosing to maintain the apparent euphoria and relaxation.
Tobacco users are at greater risk of contracting diseases that affect the heart and blood vessels (cardiovascular diseases). The risk increases with the number of cigarettes smoked and the length of time a person has been smoking. However, people who smoke less than 5 cigarettes a day can still have diseases of the heart and blood vessels:

- Tobacco use causes stroke and coronary heart disease.
- Tobacco use damages blood vessels and can make them thicken and grow narrower. This makes your heart beat faster and your blood pressure go up.
- A heart attack occurs when a clot blocks the blood flow to your heart. When this happens, your heart cannot get enough oxygen. This damages the heart muscle and leads to death.
- A stroke occurs when a clot blocks the blood flow to part of your brain or when a blood vessel in or around your brain bursts.
- Blockages caused by tobacco use can also reduce blood flow to your legs and skin.
**Tobacco use and respiratory disease**

Tobacco use damages the airways and the small air sacs in the lungs. This can cause chronic coughing, wheezing, troubled breathing, and long-term (chronic) lung disease. More than 90% of deaths are caused by chronic bronchitis and emphysema (over-inflation of the air sacs in the lungs). Together these are known as chronic obstructive pulmonary disease.
**Tobacco use and cancer**

**Tobacco use can cause cancer almost anywhere in the body.** Lung cancer is one of the most common cancers and a leading cause of death among tobacco smokers. Smoking is the cause of about 90% of all lung cancers.

Tobacco use accounts for nearly 1 in 3 cancer deaths. It is recognized that tobacco users lose at least 10 years of their lifespan, but those who quit before age 40 are able to avoid 90% of the early deaths caused by tobacco use [6].

**Tobacco use is also a risk factor for cancers of:**

1. Lips, Mouth, Tongue, Larynx (voice box), Pharynx (throat), Nose and sinuses.

2. Oesophagus (swallowing tube), Stomach, Liver, Pancreas, Colon/rectum.


**Tobacco use is also linked to acute myeloid leukemia**
Tobacco use can cause fertility problems and can have a negative impact on sexual health in both men and women. Tobacco use can damage a woman’s reproductive health. Women who use tobacco are more likely to have trouble getting pregnant. Tobacco users are 60% more likely to be infertile than non-users. Tobacco use can also cause problems during pregnancy that can hurt both mother and baby. Specifically, tobacco use can increase the risk of serious sexual and reproductive health problems, including:

- Harm to the ovaries, and female infertility. The degree of damage is dependent on the amount and length of time a woman smokes.

- Interference of nicotine and other harmful chemicals in cigarettes with the body’s ability to create substances that regulate ovulation.

- Likelihood of tobacco users having an ectopic pregnancy (where the embryo implants outside the uterus), which can threaten the mother’s life.

- Likelihood of tobacco users having serious bleeding, early delivery (premature birth), and emergency Caesarean section.

- Miscarriages (loss of pregnancy); stillbirths; babies with cleft lip or palate; and low birth-weight in babies; all caused most likely by tobacco use.

- Men’s sperm can also be affected through tobacco use, which can reduce their fertility.
Tobacco use harms nearly every organ of the body and affects a person’s overall health.

- Tobacco use can affect bone health. Women smokers past the childbearing age have lower bone density (weaker bones) and are at greater risk of having their bones broken, than women who never smoked.

- Tobacco use affects the health of your teeth and gums and can cause tooth loss.

- Tobacco use can increase the risk of having cataracts (clouding of the eye’s lens that makes it hard for you to see) and age-related macular degeneration (damage to a small spot near the centre of the retina, the part of the eye needed for central vision).

- Tobacco use is a cause of type 2 diabetes mellitus and can make it harder to control. The risk of developing diabetes is 30–40% higher for active smokers than non-smokers.

- Tobacco use causes general adverse effects on the body. It can cause inflammation and have adverse effects on immune function.

- Tobacco use is a cause of rheumatoid arthritis, which is a chronic and inflammatory disease. The joints are primarily affected with pain, swelling, stiffness, redness and/or warmth near the joint and restricted motion.

- Tobacco use can also contribute to additional renal damage. Smokers are at a significantly higher risk of contracting chronic kidney diseases than non-smokers.

- Tobacco users have increased levels of everyday stress, and they suffer more daily stress than non-smokers; smokers become less stressed when they quit smoking.
The health benefits of stopping tobacco use can be seen as follows:

- **After 20 minutes**: Heart rate and blood pressure improve.
- **After 12 hours**: Levels of harmful chemicals in the blood reduce.
- **After 2-12 weeks**: Lung function increases and blood circulation improves.
- **After 1-9 months**: Coughing and shortness of breath decrease.
- **After 1 year**: Risk of coronary heart disease is about half that of a smoker.
- **After 5 years**: Risk of stroke is reduced to that of a non-smoker.
- **After 10 years**: Risk of lung cancer falls to about half that of a smoker.

### Other effects of tobacco use among young people

**Bad skin**: Tobacco use slows the flow of blood vessels and prevents oxygen and nutrients from getting to the skin. That is why smokers often appear pale and unhealthy.

**Bad breath**: Tobacco causes halitosis or persistent bad breath.

**Reduced physical performance**: Tobacco use affects young people physically in terms of both performance and endurance, even among those trained in competitive sports. Tobacco users usually cannot compete with non-smoking peers because of rapid heartbeat, decreased circulation, and shortness of breath. The resting heart rate of young smokers is two to three beats per minute faster than non-smokers. Young smokers suffer from shortness of breath almost three times as often as non-smokers and produce mucus more than twice as often as non-smokers.

**Greater risk of injury and slower healing time**: Tobacco use affects the body's ability to produce collagen. Common injuries and damage to tendons and ligaments will heal more slowly in smokers than non-smokers.

**Increased risk of illness**: Tobacco users get more colds, flu, bronchitis, and pneumonia than non-users and people with certain health conditions, like asthma, become more sick if they smoke.

**Increased risks of drug addiction**: Teens who smoke are three times more likely than non-smokers to use alcohol, eight times more likely to use marijuana, and 22 times more likely to use cocaine.
TOBACCO USE AND BURDEN

Tobacco use among youth in the African Region

- Eighteen percent of youth (21% boys, 13% girls) currently use any kind of tobacco products.
- Six and a half percent of youth (9.2% boys, 3.2% girls) currently smoke cigarettes.
- About 12% of youth (12.8% boys, 10.1% girls) currently use tobacco products other than cigarettes.

Source: Global Youth Tobacco Survey factsheets (2003-2013)
Exposure to second-hand smoke among youth in the African Region

- Twenty nine percent of youth are exposed to tobacco smoke at home.
- About 48% of youth are exposed to tobacco smoke in public places.

Access to and availability of tobacco products for youth in the African Region

- Cigarettes are still accessible to the youth, with 28.75% reporting that they bought cigarettes in a store.
- About 69% of youth were not refused purchase of cigarettes in a store because of their age.

Exposure to advertisement and attitudes of youth in the African Region

- About 59% of youth saw pro-cigarette advertisement on billboards.
- Fifteen percent of youth report that they are likely to initiate smoking.
TOBACCO CONTROL INITIATIVES

Banning smoking in public places

Scientific evidence has clearly established that exposure to tobacco smoke causes death, disease and disability. Article 8 of the WHO FCTC requires countries to adopt and implement effective measures to protect people from exposure to tobacco smoke in indoor workplaces, public transport, indoor public places and other public places.

Given the dangers of breathing tobacco smoke, the duty to protect people from tobacco smoke as well as the right to be protected from tobacco smoke are implicit in the right to life and the right to the highest attainable standard of health. Effective measures to provide protection from exposure to tobacco smoke require the total elimination of smoking and tobacco smoke in a particular space or environment in order to create a 100% smoke-free environment:

- There is no safe level of exposure to tobacco smoke;
- Approaches other than 100% smoke-free environments, including ventilation, air filtration and use of designated smoking areas, whether with separate ventilation systems or not, are ineffective;
- Only a total ban of smoking in all indoor public places, all indoor workplaces, all public transports and other outdoor or quasi-outdoor public places protects effectively;
- All people should be protected from exposure to tobacco smoke. All public places should be 100% smoke-free.
Banning sale of tobacco products to and by minors

There are various determinants of tobacco use among young people. These include social and cultural norms; availability of different types of tobacco products; tobacco control policies; and, most importantly, tobacco industry behaviour to promote tobacco use and undermine tobacco control initiatives. Marketing efforts of the tobacco industry influence adolescent smoking behaviour, often to a greater extent, than they influence the behaviour of adults.

Article 16 of the WHO FCTC requires that countries adopt and implement measures to prohibit the sale of tobacco products to and by persons under 18 or any other age set by law. These measures may include:

- Requiring that all sellers of tobacco products place a clear and prominent warning about the prohibition of tobacco sale to minors and, in case of doubt, request that each tobacco purchaser provide appropriate evidence of having reached the legal age;

- Banning the sale of tobacco products in any manner where they are directly accessible, such as open store shelves;

- Prohibiting the manufacture and sale of sweets, snacks, toys or any other objects in the form of tobacco products which appeal to minors;

- Ensuring that tobacco vending machines are not accessible to minors and do not promote the sale of tobacco products to minors. Ideally, countries should prohibit the introduction of tobacco vending machines or impose a total ban on tobacco vending machines;

- Prohibiting the free distribution of tobacco products to the public and, especially minors; and

- Prohibiting the sale of cigarettes individually (retail) or in small packets which increase the affordability of such products to minors.
**Banning tobacco advertising, promotion and sponsorship**

It is recognized that a comprehensive ban on advertising, promotion and sponsorship can reduce the consumption of tobacco products. Indeed, activities relating to tobacco advertising, promotion and sponsorship are intended to expand sales and attract new users. Article 13 of the WHO FCTC requires countries to undertake a comprehensive banning of all tobacco advertising, promotion and sponsorship. This should include:

- A ban on all forms of commercial communication, recommendation or action, and all forms of contribution to any event, activity or individual with the aim, effect, or likely effect of promoting a tobacco product or tobacco use either directly or indirectly;

- A ban on cross-border advertising, promotion and sponsorship originating from and entering the territory (of any country);

- A ban on all forms of tobacco advertising, promotion and sponsorship that publicize a tobacco product by any means that are false, misleading or deceptive or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions;

- A ban on all forms of tobacco advertising, promotion and sponsorship through traditional media (print, television and radio) and all media platforms, including Internet, mobile telephones and other new technologies as well as films.

A ban on tobacco advertising, promotion and sponsorship is effective only if it has a broad scope. If only direct tobacco advertising is prohibited, the tobacco industry inevitably shifts to indirect ways to promote tobacco products and tobacco use, especially among young people. The effect of a partial ban is limited. It is also important to note that indirect promotion includes production and distribution of items such as sweets and toys or other products that resemble cigarettes or other tobacco products. Promotion of tobacco companies themselves is a form of promoting tobacco products or tobacco use, even without the presentation of brand names or trademarks.
Public awareness is essential to ensuring social change. Information, education, communication and training are the means of raising public awareness and achieving social change regarding tobacco use and exposure to tobacco smoke. Article 12 of the WHO FCTC calls for the use of all available communication tools to promote and strengthen public awareness of tobacco control issues in order to protect against exposure to tobacco smoke, promote tobacco-free lifestyles, help tobacco users to quit tobacco use and prevent others, particularly young people, from starting. Precisely, this means:

- Every person should be aware of and have access to accurate and clear information on the adverse health, socioeconomic and environmental consequences of tobacco production, consumption and exposure to tobacco smoke, including:
  - Health risks with the addictive characteristics of tobacco products;
  - Benefits of abandoning tobacco use and living a tobacco-free life;
  - A wide range of information on the tobacco industry.

- Appropriate training and awareness programmes on tobacco control should be provided to health workers, community workers, social workers, media professionals, educators, decision-makers, administrators and other tobacco-control stakeholders;

- Tobacco consumption, advertising, promotion and sponsorship, and product sale should be banned on premises used for educational or training purposes in order to complement tobacco-free messages.

- Personnel involved in education, training and communication should avoid using tobacco because they are role models. It is important to reduce the social acceptability of tobacco use and these personnel should set a good example in this respect.

- Special attention should be paid to groups that are vulnerable to tobacco marketing and its increased use. These groups include young people, particularly young women, who are targeted as “replacement smokers”, as well as frequently neglected ones, such as persons with little or no formal education, financially disadvantaged persons, and people with disabilities. In addition, measures could be taken to raise awareness among parents, teachers and pregnant women.
PREVENTION MEASURES AND RECOMMENDATIONS

Prevention programmes and interventions involving decision-makers, parents, teachers, community leaders and young people themselves are critical. If young people do not start using tobacco by age 20, then they are not likely to. There are many measures that can be implemented to keep young people tobacco-free. National and local initiatives have been shown to reduce and prevent tobacco use by young people, when implemented in an integrated manner. These initiatives include the following:

➢ Making tobacco products less affordable by raising prices of cigarettes, cigars and other tobacco products;

➢ Enforcing laws that prohibit the sale of tobacco to and by minors (children and adolescents);

➢ Banning smoking in public places, including workplaces, schools, day-care centres, hospitals, restaurants, hotels, and parks;

➢ Banning tobacco advertising, promotion and sponsorship;

➢ Enforcing the requirement of large pictorial health warnings on tobacco packages;

➢ Limiting tobacco selling at places, areas and positions where products are likely to be seen by young people;

➢ Enforcing movie-age restrictions and discouraging adolescents from playing video games or using other media that feature tobacco use;

➢ Countering mass-media campaigns that are pro-tobacco marketing and targeting young people (i.e., TV and radio commercials, posters, and other media messages);

➢ Institutionalizing the use of evidence-based curricula in primary and secondary schools;

➢ Encouraging schools to enforce tobacco-free policies for students, faculty, staff, and visitors both on campus and at all school-sponsored events off campus;

➢ Setting up youth centres where young people themselves should inform, educate and communicate with their peers for behaviour change;

➢ Developing and implementing programmes for informing and educating young people; sensitizing and mobilizing decision-makers, parents, teachers, as well as community leaders to help them make healthy choices;

➢ Encouraging people, who are willing to quit tobacco use, to talk to their health-care providers, who can help them to find the best way to quit. Most tobacco users are dependent on nicotine, and it is difficult for them to quit on their own.
People who start smoking as young teens are more likely to:

- Get addicted to nicotine;
- Become lifetime smokers;
- Get diseases caused by tobacco use;
- Die prematurely from a disease caused by tobacco use.

Specific recommendations to young people:

- Do not start smoking or using tobacco products. Stay tobacco-free!
- Get help if you smoke or use tobacco. You do not have to try quitting alone!
- Be aware of the health risks of tobacco use. You should know that tobacco use kills!

There are many things we can do to help keep young people tobacco-free and to create a world where seeing people smoke or use other tobacco products is the exception, not the norm.

Specific recommendations to parents and educators:

- Be a role model. Set a good example by not using tobacco yourself!
- Educate your children and the youth. Help them make healthy choices!
- Be informed about key facts on tobacco. Network with other parents and educators!

Specific recommendations to tobacco control advocates:

- Raise awareness with regard to the adverse health, socioeconomic and environmental consequences of tobacco consumption, and exposure to tobacco smoke!
- Support the enforcement of measures that will make it difficult for young people to use tobacco, including measures on smoke-free environments; ban on tobacco advertising, promotion and sponsorship; and ban on sale of tobacco products to and by minors!
- Promote healthy lifestyle and share best practices!
CONCLUSION

Young adulthood marks an important developmental period for the establishment of health behaviours that will persist throughout life. It is also a critical time when experimentation of young can lead to regular tobacco use as adults. There are various determinants of tobacco use among young people. These include cultural and religious norms, availability of different types of tobacco products, tobacco control policies and strategies and, perhaps most importantly, the tobacco industry’s attitude towards promoting tobacco use and undercutting tobacco control strategies. Advertising, promotion and marketing efforts of the tobacco industry influence the tobacco use behaviour of young people, often to a greater extent than they influence the behaviour of adults. In order to address the issue of tobacco use among young people, countries must intensify efforts to prevent them from using tobacco, and continue to help those who start using tobacco to quit. In doing so, countries will help young people live longer and healthier lives than previous generations did. Thus, countries could end the tobacco epidemic in the Region.
REFERENCES

7. Guidelines for implementation of Article 5.3; Article 8; Articles 9 and 10; Article 11; Article 12; Article 13; Article 14, 2013 Edition, World Health Organization, Geneva, 2013

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