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Onset of Adolescent Smoking, Its Implications and Remedies

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Abstract

Tobacco use is an alarming preventable epidemic worldwide and has become the leading cause of death. Due to widespread bans on tobacco advertising, promotion, and awareness efforts, smoking is relatively well-controlled in most developed countries. In Finland, France, Norway, and New Zealand, smoking rates have decreased by 14–37% (Doku, 2020). However, the health burden from tobacco use is disproportionately rising in low- and middle-income countries. Out of five million tobacco-related deaths globally, 80% occur in these nations. Most second-hand smoke-related child deaths also happen in African and Asian countries. Despite these serious consequences, there is very little effort to raise awareness about the extent of the risks associated with tobacco use in the developing world. In over 40% of low-income countries, there are no national bans on cigarette advertising or sponsorship activities. (ASH Fact sheet: Tobacco and the Developing World, 2019). Pakistan is a high-burden country in tobacco use, with smoking prevalence in males at 36% to 45% and females at 2% to 9%. About 1,200 adolescents start smoking every day in Pakistan, representing a highly dangerous public health concern (https://www.dawn.com/news/1692612).

Introduction

Smoking has become the leading cause of death in the world, killing one person every six seconds. According to a WHO report, tobacco is killing 5.4 million people annually, which is more than other deadly diseases like malaria**,** tuberculosis, and HIV combined mortality in the world. These deaths will continue to increase to a dramatic figure of more than 8 million a year by 2030, if the current tobacco use rate is not checked urgently (Tobacco the Problem, 2009).

Smoking hurts everyone, which includes unborn babies and those who don't smoke; thus, it is an issue of disastrous consequences. Second-hand smoke is responsible for 430 cases of sudden infant death, 24 500 low-birth-weight babies, 71 900 pre-term deliveries, and 200 000 episodes of childhood asthma annually (The global Tobacco Crisis, Tobacco -global agent of death 2008).

Sadly, tobacco products are the only legally produced consumer material that kills

when is used, so remains a source of a persistent epidemic. Resultantly, every adult dying earlier because of smoking behavior is being replaced by another two smokers, one of whom may also die earlier, as it affects nearly every organ of the body (let's make the next generation tobacco-free, 2014).

In tobacco products, cigarettes are frequently used by people; other options include snuff, flavored little cigars, cigarillos, and shisha, and all contain the same deadly poisons with the fatal health consequences as cigarettes and are just as addictive. All affect adolescent brain development and increase the risk of many types of cancers, oral, lung, and heart diseases, and low-birth-weight babies. Even the smokeless tobacco is highly addictive.

Although recognized as an adult problem, the focus has now shifted to the first cigarette experimentation that starts at an early age, resulting in a greater risk of nicotine dependence. The onset of cigarette smoking typically occurs and is established during childhood. Early age smoking not only causes serious health issues but also becomes a gateway to many kinds of drug abuse and other risky behaviors. If current smoking rates are allowed to persist, 5.6 million adolescents are likely to die young from tobacco use. In prevailing circumstances, young age smoking becomes a significantly worrisome public health issue. Researchers have greatly realized that many of the adolescents who smoke regularly have a lower likelihood of stopping on their own, leading to high-risk behaviors. Adolescent smoking is thus one of the most intensively studied subjects around the world in search of credible prevention strategies.

Smoking has been decreasing since the beginning of the 21st century. According to WHO estimates, smoking rates in the world's population aged ≥ 15 years decreased by 6.7% globally since 2000, and by 4.1% since 2005, when the WHO Framework Convention on Tobacco Control (FCTC) came into effect. Although the use of tobacco products is declining globally, its trend in the African, Asian, and the East Mediterranean regions of the world generally remains flat. Only the American region is expected to achieve the WHO mark of a 30% curtailment in male/female smoking. According to the WHO report, the American subcontinent is making good progress and hopes to attain its objective five years earlier. The European continent, however, may not achieve a 30% reduction in smoking among females. For males only, smoking is projected to increase rather significantly in the Eastern Mediterranean Region from 33.1% to 36.2% in ten years, i.e., 2010-2025, unless the tobacco preventive measures are reinforced. (WHO global report on trends in the prevalence of tobacco smoking 2000-2025 - Second edition, 2018).

Despite a dire need, many challenges have constrained intervention measures. Some adolescents smoke with much greater variability than adults; others do not view tobacco use as a serious problem, are unenthusiastic to quit, and consider preventive measures as interference in their right of privacy and autonomy. There are also strong reasons for adolescents to stop smoking, which are motivations for the planner to avail interventional opportunities. For older adolescents, especially from vocational colleges and in the unemployed population, saving money is the most cited motivation to convince them not to smoke. Other motivators include social pressure and the feelings that smoking is an unacceptably bad image of a personality, and a source of many health risks**.**

Notwithstanding that, learning more about tobacco use among adolescents to offer the best practices of tobacco prevention to better guide cessation techniques is the focus of this study. Surely, prevention is the most promising approach to control this pediatric epidemic.

Literature Review

The adolescent period is a social transformation from a child to a young adult which is characterized by many behavioral changes, emotional instability, aversions and the

formation of personality building. Since inspiration is at the highest level at a younger age, adolescents are more conscious of their personality and styles at this stage. Many adolescents also come under pressure due to high academic achievement objectives.
Generally, children experience these biological, psychosocial, and environmental changes without much trouble. Those who struggle to adapt to these stresses are more likely to engage in unhealthy behaviors such as smoking. This habit can eventually lead to other delinquent activities. According to a study, adolescents who smoke are three times more likely than non-smokers to become alcoholics, eight times more likely to use Marijuana, and twenty-two times more likely to use Cocaine ("11 Facts About Teen Smoking", n.d.).
Earlier smoking has serious health issues. Smoking that onsets at an earlier age, i.e., 25 years, is reported to reduce lifespan by 4 years, whereas adolescent smoking onset at 15 years reduces lifespan by 8 years. (Byeon, 2015). Smoking has a host of short-term health risks, some of which include nicotine addiction, drug use, and respiratory disorders. Smoking is also responsible for many behavioral and social problems such as street quarrels and engagement in unprotected sex. The long-term effects of cigarette smoking include lung cancer, heart disease and stroke ("WHO | Health effects of smoking among young people", 2019). Moreover, adolescence, ranging from 12 to 18 years, is a critical time for brain growth, which is especially at great risk from nicotine exposure.
A range of social, demographic, and other characteristics, including age, peers, parents' home environments, socioeconomic status, and mental illness, have been identified as significant determinants of smoking.

Age

Smoking initiation is closely linked to age, and it is mostly established during the teenage years. Children may try their first cigarette out of curiosity while in primary school or even before starting school. Usually, tobacco use begins in adolescence, with many underestimating their risk of becoming addicted. In Holland, a study on adolescent smoking observed that sixteen percent of children started smoking at a very early age in elementary school, which increased rapidly from 41% at ages 12-13 to 65% by age 15 and 72% by age 18 (White, H. R., Johnson, V., & Buyske, S., 2000). Mostly, adolescents carry their smoking behavior into adulthood. Moreover, a younger smoking onset has a greater probability of nicotine addiction and a lesser ability to quit. In the US, a national survey on Drug Use and Health revealed that 80% of adults had started smoking by age 18, and 90% of them began after age 19, with peak experimentation occurring between ages 13 and 16 (Bach, 2020). A comprehensive analysis of data from several National Surveys, published in the 2012 Surgeon General's Report, established that smoking initiation substantially increases between ages 12 and 18, with a smaller rise between ages 18 and 20 (R.J., K., & L.Y., 2015).

Peer

Adolescent peer relationships are consistently recognized as one of the major influencing factors in adolescent smoking initiation. It is greatly influenced by the youngster’s need to establish close peer bonds. An adolescent with poor self-esteem/self-confidence and high-level symptoms of depression is particularly vulnerable to the smoking peer group influences. Studies state that in Ethiopia, adolescents whose companions smoked were 42.2 times more at risk of smoking behavior (Rahman, Ghasemi & Zhou*, 2018).
While parents have more influence on the children's smoking onset at an earlier age, peers are known to have greater influence in the latter part of the adolescent age, when the role of parents diminishes, and children spend most of their time with friends in school, other social functions, and extracurricular activities. Further research proves that at 12-13 years, parents and peers smoking behavior equally influence the

children, at the later stage, i.e., 13-14 years, peers become a greater predictor of adolescent smoking onset (Mulvihill, 2014).

Peers reflect on adolescents not only through peer influence but also through peer selection. Adolescents who are inclined to smoking behavior, greatly associate themselves with smoker friends. In this situation, peer influence comes into play in adolescent smoking onset. In fact, children extend friendship with colleagues of similar behavior and break off with those of dissimilar attitudes. Studies of primary socialization theory also suggests that children in their primary socialization comfort them in the friendship crowds who are greatly similar to them .This insight qualifies the peer role in young age smoking behaviors. (White, H. R., Johnson, V., & Buyske, S. 2000).

Teenagers also report in studies that they experience an internal self-pressure to smoke if others around them do. In this situation, the behaviors of the best friends are the best predictors of adolescent smoking, especially for females. According to a Canadian Youth Smoking Survey- 2010/2011,72.1% of adolescent smokers revealed that five or more of their close friends were also smokers (Mulvihill, 2014). Peer influences on teenagers' smoking onset are thus more subtle and convincing.

Parents-Home Environments

Maternal smoking is a more forceful tobacco exposure to adolescents because they are exposed to it at an early age consistently. This influence is rated on parent–child relationships and becomes more obvious when children imitate their smoking parents as a role model due to social reinforcement. Studies reveal that parents' smoking behavior is a greater predictor of childhood smoking onset between 11 - 13 years of age (Mulvihill, 2014). In a nationwide survey of high school students aged 15–18 years in Taiwan, it was found that among boys,25% with smoking parents, versus 16.5% with non-smoking parents, and for girls, 6% with smoking parents, versus 2.9% with non-smoking parents smoked (Wen et al., 2005).

This risk is smaller when parents are former smokers or declining smokers. If parents quit smoking at a later stage, parental smoking modeling may work again for the children to also quit smoking. It has also been observed that the non-smoking parental modelling effect works more strongly, the younger the offspring are. Adolescents are not likely to smoke if parents restrict the availability of cigarettes at home, dictate to their children not to smoke at home, make them aware of tobacco risks, and punish them if they smoke. Adolescent smoking onset is less likely if their parents' smoking cessation occurs before their children are nine years old. It is the age at which adolescents normally first experiment with cigarette smoking (White, H. R., Johnson, V., & Buyske, S. (2000).

A survey conducted on 31395 Canadian secondary school students established a positive correlation between parental smoking and adolescent smoking. It concluded that parent smoking was highly predictive of children's smoking behavior, i.e., 75.7% regular smokers had a parent who smoked, and that children between the ages of 15-17 years were more prone to smoking if anyone in their household smoked (Mulvihill, 2014).

Socio-economic status

Socioeconomic status measures an individual's economic and social position. Smoking rates are generally higher among the long-term unemployed, single parents, homeless individuals, and minorities, who tend to be socioeconomically disadvantaged because of lower education levels, weaker job opportunities, and limited household income. Studies worldwide have shown that regular smoking is most common among adolescents from lower socioeconomic groups, as they are more likely to be exposed to secondhand smoke at home. The 2016 National Drug Strategy Household Survey in Australia found that adolescents from the most disadvantaged

populations were four times more likely to be exposed to tobacco use at home, where at least one family member smoked indoors daily ("Tobacco in Australia," 2019). A research on 1308 children of 12 - 17 years' age group revealed that the youth smoking risk is higher by 30% for each step down in the income of their parents and by 28% with every step down in the education of their parents (Soteriades, & DiFranza, 2003). In the US. 30% of those below the poverty level smoke, and in the UK, 25% of people in the "manual" occupation smoke (Hiscock, Bauld, Amos & Fidler, 2011). A negative relationship between socioeconomic status and adolescent smoking has been strongly supported all over the world by 76% of the research work (Soteriades & DiFranza, 2003).

Smoking in pregnancy is also common among the socially disadvantaged class. According to a national survey conducted in Britain in 2005, mothers in routine and manual occupations were more than four times, i.e., 48% as likely as those in managerial/ professional occupations to have smoked throughout pregnancy, which specifically hurt unborn babies besides the adolescent around (Hiscock, Bauld, Amos, Fidler, & Munafò, 2011).

Smoking hits the low socioeconomic status community very hard in another way. Children from such families get demoralized, demonstrate poorer school grades, do not reach high school education, resulting in lower aspirations concerning career, and are driven to substance abuse and smoking. They not only smoke more cigarettes per day, but also smoke each cigarette heavily and extract more nicotine, resulting in higher dependence and lower rates of smoking cessation. Quitting tobacco is also difficult in low socioeconomic status because of lesser social support and motivation in their quit attempts.

Mental Health

A significant association between adolescent smoking and mental illness has been reported consistently by many studies. Smoking is generally believed to be beneficial in common psychiatric disorders, i.e., controlling situational anxiety and improving concentration. Perceived improvements in psychological well-being and alleviation of withdrawal symptoms become powerful motivating factors for the adolescent to smoke. The smoking rate is therefore significantly high among people with mental health disorder that causes functional impairment. Two American and an Australian' survey established an association between teenage smoking and the symptoms of anxiety and depression in a large, representative teenage population. The research confirmed a twice the smoking risk in the high-psychiatric-morbidity teenagers. In the smoking group, adolescents with a high level of mental illness were found to have twice the increase in regular smoking risk. In this analysis, the link between smoking and psychiatric morbidity was more evident in females. and younger smokers had significantly higher rates than the older ones (Patton et al., 1996). In 1999–2004, the National Health and Nutrition Examination Survey analyzed the association of smoking onset with depression and anxiety on a nationally representative sample of 12–19-year-old US adolescents. Of the 6355 adolescent sample used to analyze smoking and anxiety, 2911, i.e., 47.1%, were observed smokers, and of the sample of 1884 respondents to study smoking and depression, 514, i.e., 27.6%, were found to be smokers. In both the samples, ever smokers were more likely to be older, live with smokers, from lower socioeconomic status live and less likely to attend schools (Richardson, Ping He, Curry & Merikangas, 2012).

A recent study in the UK reveals that 42 percent of all cigarettes are consumed by the people with mental illness, when tobacco use in the population generally got decreased in the last 20 years (Fluharty, Taylor, Grabski, & Munafò, 2016) Smokers have 1.3 times greater threat to have depression disorder and 1.5 times greater threat to face anxiety disorder than the non-smokers (Byeon, 2015). Children with mental illness, i.e., depression, anxiety, and stress, start smoking earlier in age and smoke

heavily to get addicted. Their smoking rates also tend to increase with the severity of the disease. The younger the adolescent, the greater the threat of depression disorder from smoking. According to another study, younger adolescents who smoked at age 12 - 14 were 4 times more at risk of facing depression symptoms compared to non-smokers. In another study on 1,731 Chinese adolescents aged 13–14, it was established that smokers had a 1.7 times greater risk of depression (Byeon, 2015).

Analysis

Through a comprehensive analysis of this study, one is well educated on the major reasons for the onset of smoking in adolescents. Although stringent preventive measures are in force in the world with some success, the younger generation is increasingly adopting smoking behaviors. The situation in the developing world is far worse. Almost 80% smoking related deaths occur in low /middle class countries due to a lesser awareness of health hazards.

Since tobacco control regulations are not that assertive, the developing world is being specifically targeted by the tobacco industry. Resultantly, this epidemic is spreading ominously in the low-income countries that are unable to bear huge human and economic losses.

Despite vigorous efforts to eradicate tobacco use, smoking remains the leading cause of preventable disease in the world. According to WHO estimates, tobacco use is likely to kill one billion people worldwide in this century if the current smoking trends are allowed to continue. (Liu, Zhao, Chen, Falk & Albarracín, 2017).

Besides being preventable tragedies, smoking-related deaths have an enormous cost to bear. Global tobacco damage-related economic cost, including medical expenses and productivity losses from death and disability, has been calculated at more than US$ 1.4 trillion per year, which is equal to 1.8 percent of the world's annual GDP. The main economic burden falls on the nations and the people who can't afford the cost**.** ("Tobacco",2019).

Although the developed world is witnessing a general decrease in adolescent smoking prevalence, there is a sharp increase in the developing countries. Thousands of youngsters continue to initiate smoking every year and become addicted to heavy smoking with innumerable health risks, including psychological distress and substance abuse. Pakistan is no different from other developing countries, about 15% of our college students indulge in smoking (Sami, N., Noorani, S. S., Lakhani, L. S., Ghouse, A., & Valliani, S. (2013)). Such children disassociate from parents, perform poorly in school, hardly participate in extracurricular activities, and are less likely to quit smoking. Ironically, smoking cessation among adolescents is half of the adult rate, so there is a greater need for interventions. (Tanski, 2011).

The popularity of alternative tobacco products and e-cigarettes is leading to additional health challenges, necessitating governments and the health care people to intervene. Tobacco use in the US alone costs heavily, causes more than 440,000 deaths a year, with one death, 20 more people pick up tobacco-related diseases, and entails $96 billion in medical expenses and $97 billion in productivity loss (Tanski, 2011).

Children who initiate smoking earlier than 15 years are 4 times more prone to lung cancer risk than those who start at 25 years or later. (Park, 2011). Earlier identification of the smoking risk factors is essential to prevent teenagers from initiating smoking, which may lead them to establish smoking behavior and addiction.

Prevention

Prevention should have three guiding public health goals: -

Preventing adolescent tobacco use

Facilitating those who want to quit smoking

Educating the public about the harmful consequences of tobacco use.

Government Role

The evidence strongly supports the effectiveness of government legislation. Public awareness campaigns and other related initiatives to prevent smoking in adolescents have led to a general decrease in smoking prevalence across all age groups. Countries should continue improving their laws and regulations that would limit adolescent accessibility to tobacco products. Effective measures to reduce childhood smoking include: -

Making smoking less affordable by prohibitively taxing cigarettes and other tobacco products. Taxes are very effective tobacco control measures to reduce tobacco use and have the highest impact on teenagers. Studies revealed that 14-15-year-olds were the most affected age group by the tax increases. With taxes increased by $0.94, smoking in 14- 15-year-olds decreased by 13.1% -7.4%, respectively. (Hawkins, Bach & Baum, 2016).

Changing social norms through smoke-free policies. Ban smoking in public places, i.e., schools/colleges, workplaces, hospitals, restaurants, public transport, and family cars carrying minors.

Regulating tobacco advertising by comprehensive advertising restrictions and carrying out aggressive and hard-hitting anti- smoking campaigns through national mass media means.

Accelerating tobacco control efforts and monitoring progress on tobacco control measures to reform preventive measures periodically.

Academic institutions' role in tobacco control

Since cigarette smoking mostly begins at a younger age, schools/colleges can play an important role in prevention. Smoking hazards should be an important subject in the elementary and high school curricula. It should educate students and their families on the short- and long-term negative health consequences. Studies have established that school-based interventions were notably effective in reducing adolescent smoking. On average, 12% reduction in students' smoking through awareness at the elementary stage of their schooling was noticed**.** (Harvey & Chadi, 2016).

Smoking is a pediatric concern that has a pivotal role in preventing tobacco use.

They need to learn more about remedial measures and cessation techniques that can be performed in a health care setting. Their education about smoking prevention and cessation should be made a regular subject in the curricula of medical schools and residency programs**.**

Smoking prevention in the primary care setting

A family-centered intervention at the primary care setting has a greater impact on adolescent smoking prevention. As a part of routine health care, physicians have greater responsibilities to intervene well in time to prevent smoking among children and their families. Counselling can greatly help to address adolescents' attitudes and their knowledge about tobacco and its hazards, especially when they are misled by social or environmental elements. Counselling about short-term consequences of smoking is more effective, because the long-term consequences may not be that meaningful for younger age groups.

The physicians may include tobacco counselling in the periodic physical checkups of the children and give them a strong message about the significance of abstaining from smoking. They may be reminded that tobacco use gives foul breath, leaves yellow stains on fingers and teeth, and causes a chronic cough leading to respiratory and cardiac diseases. Children should be convinced that smoking abuse causes social problems and is a gateway to drug abuse. It is more valuable to inform parents about the smoking health risks that can have lifetime effects and the ways to reduce or avoid them. To save teenagers from secondhand smoke, physicians should ask

parents to refrain from tobacco use and offer advice to quit smoking. Parents are to be informed that exposure to second-hand smoke is harmful to children even before their birth. They need to know the good effects of quitting smoking during a pregnancy and the early years of their offspring's life.
Although psychiatric disorders, i.e., anxiety and depression, greatly accelerate smoking, their treatment has since been ignored. Earlier individual-focused psychological treatment combined with smoking prevention programs in the primary care setting is essential.

Family-based, interventions
Lesser parental – children attachment is strongly associated with a significantly higher risk of teenagers smoking. Family togetherness plays a significant role in adolescent smoking uptake and its prevention. It is measured by the frequency with which children take meals together, the amount of time and conversations that take place at the dining table with the family members, and their relationships with their parents. Results are consistent across many surveys; which reveal that teenagers having five times a week get together at family meals were less likely to participate in risky behaviors such as smoking, alcohol and substance use, and infrequent, i.e., less than 3 meals a week family meals, were in four times greater risk to smoke (Dietz, Arheart, Sly, Lee & McClure, 2016).
Parental monitoring also proves to be protective for children's smoking onset.
Authoritative parenting, with intimate rule-setting, is the key to effective interventions in the adolescent age group. It favorably impacts middle- high-school children who are more receptive to tobacco risks at this stage.

Intervention In Low-Income Countries
Tobacco consumption is concentrated in the developing world, where 80% population of the world's population lives. Adolescent smoking is considerably high in the low/middle income countries i.e., about four times higher than in the UK. The smoking epidemic is in fact reinforcing their poverty by creating greater burden on their health systems and economies, due to greater proportion of their smoker's sufferings from tobacco-related diseases.
Tobacco control measures lag in the developing countries; as a result, tobacco companies are targeting their children more in marketing. By 2030, 7 million people are estimated to die from tobacco consumption if the current situation continues to prevail in these countries (Abdullah & Husten,2003).
The tobacco industry is greatly responsible for undermining their efforts in tobacco control, due to the enormous business opportunities available in underdeveloped countries. Under these circumstances, a greater focus of international efforts on tobacco control measures should shift to the most threatened, low/middle income countries.
The developed world is doing well in tobacco control; its experience can be the best guidelines for the affected countries to follow, which need immediate help. International donors such as the World Bank, IMF, WHO, Bloomberg Foundation, and the Gates Foundation need to expedite their assistance in controlling tobacco use in the developing world, with a specific emphasis on adolescent smoking.

Conclusion
This paper identifies various causes of teenagers' smoking behavior and suggests appropriate guidance for needed interventions. Although the findings of this investigation are consistent with the previous studies, the results of this study are a step forward in a greater understanding of the linkages of adolescent smoking behaviors and provide valuable guidelines for designing our anti-smoking interventions. It is also believed that the guidance determined in this study will

enlarge the scope of preventive measures and make them more meaningful, with greater emphasis on the most threatened low-income countries.

Serious interventions with increased cooperation between countries will, however, be required for formulating international initiatives. All efforts should focus on defeating the social acceptability of tobacco use with people's participation, and integration of population-specific smoking controls with other healthcare services. Mobilization of the business community with financial incentives and participation of international donors will be an added step forward in relieving deprived communities from the tobacco-related disease burden.

Bibliography

Doku D. (2010). The tobacco industry tactics-a challenge for tobacco control in low- and middle-income countries. African health sciences, 10(2), 201–203.

Action on smoking and health. (2019). ASH Fact sheet: Tobacco and the Developing World [Ebook]. Retrieved from https://ash.org.uk/wp-content/uploads/2019/10/Tobacco-Developing-World.pdf.

Tobacco The Problem. (2009). [Ebook]. Retrieved from https://www.who.int/nmh/publications/fact_sheet_tobacco_en.pdf.

The global tobacco crisis Tobacco – global agent of death. (2008). [Ebook]. Retrieved from https://www.who.int/tobacco/mpower/mpower_report_tobacco_crisis_2008.pdf

Let's make the next generation tobacco-free. (2014). [Ebook]. Retrieved from https://www.hhs.gov/sites/default/files/consequences-smoking-consumer-guide.pdf

WHO global report on trends in prevalence of tobacco smoking 2000-2025 - Second edition. (2018). [Ebook] (2nd ed.). Retrieved from https://www.who.int/tobacco/publications/surveillance/trends-tobacco-smoking-second-edition/en/

Facts About Teen Smoking. Retrieved 14 March 2020, from https://www.dosomething.org/us/facts/11-facts-about-teen-smoking.

Bach, L. (2020). The path to tobacco addiction starts at very young ages [Ebook].Retrieved from https://www.tobaccofreekids.org/assets/factsheets/0127.pdf

RJ, B., K, S., & LY, K. (2015). Public Health Implications of Raising the Minimum Age of Legal Access to Tobacco Products.

Byeon, H. (2015). Association among smoking, depression, and anxiety: findings from a representative sample of Korean adolescents.

WHO | Health effects of smoking among young people. (2019). Retrieved from https://www.who.int/tobacco/research/youth/health_effects/en/.

Yuan Zhou., et al. "Adolescent Smoking Behavior in European Countries: Influences of Belief- and School-Related Factors". EC Pediatrics 7.6 (2018): 489-497.

https://www.researchgate.net/publication/284093775_Parental_and_Peer_Influences_on_Adolescent_Smoking_A_Literature_Review.

Wen, C., Tsai, S., Cheng, T., Hsu, C., Chen, T., & Lin, H. (2005). Role of parents and peers in influencing the smoking status of high school students in Taiwan [Ebook]. Retrieved from https://tobaccocontrol.bmj.com/content/tobaccocontrol/14/suppl_1/i10.full.pdf

Greenhalgh, EM, Scollo, MM, & Pearce, M.9.1 Socio-economic position and disparities in tobacco exposure and use. In Scollo, MM and Winstanley, MH [editors]. Tobacco in Australia: Facts and issues. Melbourne: Cancer Council Victoria; 2019.

Soteriades, E., & DiFranza, J. (2003). Parent's Socioeconomic Status, Adolescents' Disposable Income, and Adolescents' Smoking Status in Massachusetts.

Hiscock, Rosemary & Bauld, Linda & Amos, Amanda & Fidler, Jennifer & Munafò, Marcus. (2011). Socioeconomic status and smoking: A review. Annals of the New York Academy of Sciences. 1248. 107-23. 10.1111/j.1749-6632.2011.06202.x..

Patton, G. C., Hibbert, M., Rosier, M. J., Carlin, J. B., Caust, J., & Bowes, G. (1996). Is smoking associated with depression and anxiety in
teenagers? American journal of public health, 86(2), 225-230.

Richardson, A., He, J. P., Curry, L., & Merikangas, K. (2012). Cigarette smoking and mood disorders in US adolescents: sex-specific associations with symptoms, diagnoses, impairment and health services use. Journal of psychosomatic research, 72(4), 269-275.

Fluharty, M., Taylor, A., Grabski, M., & Munafò, M. (2016). The Association of Cigarette Smoking with Depression and Anxiety: A Systematic Review.

Hyun Hwang, J., & Woo Park, S. (2014). Age at Smoking Initiation and Subsequent Smoking Among Korean Adolescent Smokers. In National Institutes of Health.

Tanski, S. (2011). Best Practices in Adolescent Tobacco Prevention and Cessation Webinar [Ebook]. American Academy of Pediatrics. Retrieved from https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Richmond-Center/Documents/BestPracticesWebinarSlides.pdf.

Robalino, J., & Macy, M. (2018). Peer effects on adolescent smoking: Are popular teens more influential? In National institutes of Health.

Action on smoking and health. (2019). ASH Fact sheet: Tobacco and the Developing World [Ebook]. Retrieved from https://ash.org.uk/wp-content/uploads/2019/10/Tobacco-Developing-World.pdf.

Harvey, J., & Chadi, N. (2016). Preventing smoking in children and adolescents: Recommendations for practice and policy. In National Institutes of Health.

M, R., & T, L. (2008). The role of socioeconomic status, peer and school context for adolescent smoking [Ebook]. Arch Public Health. Retrieved from https://www.wiv-isp.be/Aph/pdf/aph66_69_87.pdf.

Benitez, Z. (2014). Peer Pressure: Teen Smoking - Health Beat. Retrieved 18 April 2020, from https://jamaicahospital.org/newsletter/peer-pressure-teen-smoking/.

Robinson, D., Wickham, S., Campbell, M., Robinson, J., Pearce, A., Barr, B., & Wouwe, J. (2017). Are social inequalities in early childhood smoking initiation explained by exposure to adult smoking? Findings from the UK Millennium Cohort Study. In National Institutes of Health.

Richardson, A., Ping He, J., Curry, L., & Merikangas, K. (2012). Cigarette smoking and mood disorders in U.S. adolescents: Sex-specific associations with symptoms, diagnoses, impairment and health services use. In National Institutes of health.

Liu, J., Zhao, S., Chen, X., Falk, E., & Albarracín, D. (2017). The Influence of Peer Behavior as a Function of Social and Cultural Closeness: A Meta-Analysis of Normative Influence on Adolescent Smoking Initiation and Continuation. In National Institutes of Health.

Tobacco. (2019). Retrieved 18 April 2020, from https://www.worldbank.org/en/topic/tobacco.

Tanski, S. (2011). Best Practices in Adolescent Tobacco Prevention and Cessation Webinar [Ebook]. American Academy of Pediatrics. Retrieved from https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Richmond-Center/Documents/BestPracticesWebinarSlides.pdf.

Tanski, S. (2011). Best Practices in Adolescent Tobacco Prevention and Cessation Webinar [Ebook]. American Academy of Pediatrics. Retrieved from https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Richmond-Center/Documents/BestPracticesWebinarSlides.pdf.

Park, S. (2011). Smoking and adolescent health. In National Institutes of Health
Hawkins, S.S., Bach, N., & Baum, C.F. (2016). Impact of tobacco control policies on adolescent smoking. Journal of Adolescent Health,58(6),679-685.
Harvey, J., & Chadi, N. (2016). Preventing smoking in children and adolescents: Recommendations for practice and policy. In National Institutes of Health.
Dietz, N., Arheart, K., Sly, D., Lee, D., & McClure, L. (2016). Correlates of smoking among youth: the role of parents, friends, attitudes/beliefs, and demographics. In National Institutes of Health.
General, S. (2020). Preventing Tobacco Use Among Youths, Surgeon General fact sheet. Retrieved 19 April 2020, from https://www.hhs.gov/surgeongeneral/reports-and-publications/tobacco/preventing-youth-tobacco-use-factsheet/index.html.
Soteriades, E., & DiFranza, J. (2003). Parent's Socioeconomic Status, Adolescents' Disposable Income, and Adolescents' Smoking Status in Massachusetts. In National Institutes of Health.
Wen, C., Tsai, S., Cheng, T., Hsu, C., Chen, T., & Lin, H. (2005). Role of parents and peers in influencing the smoking status of high school students in Taiwan. In National Institutes of Health.
Mulvihill, C. Parental and Peer Influences on Adolescent Smoking: A Literature Review. In Interdisciplinary Journal of Health Sciences.
Patton, G. C., Hibbert, M., Rosier, M. J., Carlin, J. B., Caust, J., & Bowes, G. (1996). Is smoking associated with depression and anxiety in teenagers? American journal of public health, 86(2), 225-230.
Prochaska, J., Das, S., & Wolff, K. (2016). Smoking, Mental Illness, and Public Health. In National Institutes of Health.
Abdullah, A., & Husten, C. (2003). Promotion of smoking cessation in developing countries: a framework for urgent public health interventions [Ebook]. BMJ Journals.
Sami, N., Noorani, S. S., Lakhani, L. S., Ghouse, A., & Valliani, S. (2013).
Smoking practices and nicotine dependence among adolescents in Pakistan. *Journal of Pakistan Medical Association*, *63*(10), 1260.