

Health Effects and Social Consequences of Tobacco Use

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Tobacco is the only permissible substance that harms many of its consumers when used precisely as deliberated by its producers. It is one of the greatest causes of premature deaths in the world and can be prevented with little motivation and self-control measures by educating people to change their attitudes towards it; its situation is getting worse day by day.

Cigarette smoking is one of the most common forms of tobacco use. WHO currently estimates that around 80% of the world's 1.2 billion tobacco users live in low- and middle-income countries.

Tobacco kills more than 7 million people each year, including more than 1.6 million non-smokers exposed to second-hand smoke. The older direct-use, second-hand-smoke and smoke-free-law figures in the original paragraph should not be presented as current estimates.

The most vulnerable group exposed to Tobacco use is adolescents, as this shares the maximum weight of its use. Tobacco products used by adolescents include cigarettes (the most commonly used tobacco products), cigars, shisha, hookahs, smokeless tobacco, and newer oral products such as e-cigarettes, pouches, nicotine lozenges, gums, strips, and chewing sticks. According to the CDC, almost 9 per 10 cigarette smokers start smoking at age 18, and around 99% of the smokers try it for the first time by not more than 26 years of age, and the fashion of flavoured tobacco products is more tempting towards adolescents. Adolescence is defined as a transitional phase of growth and development between childhood and adulthood. The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19. This age range falls within WHO's definition of *young people*, which refers to individuals between ages 10 and 24.

Tobacco use among adolescents has been the most rising concern among many public health personnel and policymakers for many decades as the global burden of this issue is rising day by day; trends of tobacco use are increasing instead of decreasing, especially among the young population in which around 1000 of them starts smoking every single day hence increasing the burden many folds, Use of tobacco is prevalent in approximately 33% world population in some form or the other, as a consequence of that 50% of the people die due to this habit early in their ages. (Centers for Disease Control and Prevention, n.d.)

Three thousand two hundred young adults not more than 18 years old start smoking their first cigarette, and in addition to that, 2100 youth and young adults tend to become daily cigarette smokers, according to the CDC. There might be fewer than 3 million young smokers today if we achieve youth tobacco use as it was maintained during the years 1997 and 2003.

Pakistan ranked 15th number among countries having a high prevalence of tobacco-related illnesses. In 2013, the World Health Organization's estimates of the smoking burden revealed that overall there are 19.1% of Pakistan's adult population currently use tobacco in one form or another, including 31.8 % of males and 5.8 % of females, respectively. Of these, 9.6% of the adult population are daily smokers, including 17.9% of the males and 1% of the females, respectively. While 2.7% of the adult population are daily water pipe smokers, 4.4 % are males, and 1 % are females. Furthermore, 7.1 % of adults use smokeless tobacco daily, including 10.5% of males and 3.5% of females. Considering youth, 10.7% of all the youth currently use tobacco products, of which 13.3% are boys and 6.6% are girls.

According to WHO's latest survey results on 31 Dec 2016, the prevalence of current tobacco users among the youth of Pakistan is 10.7%; 13.3% of them are males, and 6.6% are females. Moreover, 3.3% of the youth are current smokers, 14.8% of them are males, and 0.9% are females. In addition to that, 5.3% of the youth are using smokeless tobacco, 6.4% of them are males, and 3.7% are females.

In Pakistan, Nearly 1000 to 1200 students, ages 6 to 16, start smoking every day for the first time, according to the Pakistan Pediatrics Association. GYTS 2013 report on tobacco use indicated that nearly 2 in 5 ever smokers begin smoking at most ten years of age.

According to Global Youth Tobacco Survey 2009 in Karachi shows that 14.1% of school children use tobacco in any form, 2.0% of them are current cigarette smokers around 1 in 10 uses some other form of it, 0.9% are current shisha smokers, these facts are showing that besides cigarette smoking smokeless tobacco use is more common among students (adolescents) of Karachi but there is some awareness present among the public as in the same report it is mentioned that 9 out of 10 students wanted to have a ban on its use in public spaces.

One of the studies conducted among school-going children in Karachi reveals that more than 74% of the individuals used chewing tobacco products regularly.

Tobacco use results in many vulnerable consequences worldwide. Tobacco smoking causes about 71% of lung cancer, 42% of chronic respiratory disease and around 10% of cardiovascular disease, which is one of the ten leading causes of death.

Tobacco use leads to both non-communicable including increased risk of cancers like oral, oesophagus, lung and pancreatic cancers, some precancerous conditions like leukoplakia and oral submucosal fibrosis etc., atherosclerosis leading to cardiovascular illnesses, cerebrovascular accidents, diabetes, [chronic obstructive pulmonary disease](#), immunocompromised states like rheumatoid arthritis and communicable diseases like enhance risk of TB, several eye diseases, may be erectile dysfunctions in the males and chances of miscarriages and stillbirth in pregnant ladies. It can also affect the mental health one gets more addicted to it, attracted towards other products which are more fatal than tobacco. Teens who smoke are threefold more certain to use alcohol as compared to nonsmokers, eightfold more certain to use marijuana, and 22fold more certain to use

cocaine, and they are more habitual towards risky behaviours like fighting, sexual activities, etc.

Yes, the review presents a good understanding of the local burden of the problem. The trends are showing that tobacco is the most prevalent yet preventable risk factor for deaths, and if we introduce a good surveillance system, we will be successful in decreasing the overall impact which this particular problem imposes on our health status and a remarkable decline in deaths related to its consequences.

Yes, the rationale offers robust justification for setting up the surveillance system as we have seen from the trends that if we closely monitor the situation and run a good surveillance system, we can achieve tremendous success, as achieved in many different regions where prevention results in a successful downturn in the burden of the problem.

Main Objectives:

- 1) An accurate idea of the burden of tobacco use among the adolescents of Karachi
- 2) To increase insight and education among the population of Karachi about the day-by-day emerging burden of youth tobacco use all over the world and motivate them through discussing the success if they desire to quit smoking and an overall better impact on the health by refining their practices
- 3) By explaining to them the comparison of the hazards and benefits they think they have from tobacco use and enhancing the motivation to quit smoking amongst adolescents of Karachi
- 4) Exact idea about the prevalence of health-related outcomes of tobacco use, especially the more common and fatal ones like cancers, chronic obstructive pulmonary disease and Myocardial infarctions among the adolescents of Karachi
- 5) Role of media in the improvement of cessation of tobacco use
- 6) Prohibit the use of tobacco products by banning their advertisement, promotion, and sponsorship.
- 7) Now, as we have certain objectives, we prioritize them by keeping in view the availability of resources, competent workforce and cost-effectiveness in the achievement of those actions
- 8) Assessment of benefits achieved through ongoing interventions used for decreasing the burden of tobacco among adolescents in Karachi.
- 9) We can construct a report appropriately and precisely so that others can benefit from our work strategies.

All our objectives are related to the positive health-related outcome of the surveillance system that will be achieved by using resources in the form of a trained workforce, extracting the available resources

and allocating an adequate budget to run this system by involving the stakeholders.

Case Definition:

“Tobacco use may be defined as any habitual use of the tobacco plant leaf and its products. The predominant use of tobacco is by smoke inhalation of cigarettes, pipes, and cigars. *Smokeless tobacco* refers to a variety of tobacco products that are either sniffed, sucked, or chewed”.

The ideal system is to do active surveillance as we have to extract the information about tobacco use on an individual basis, but the limitation of it is the need for excessive funding and time consumption during this process so we can use the sentinel surveillance in order to trace more vulnerable/high-risk group that belongs to the specific region so more authentic information is collected in limited time duration.

High school adolescents (9-12th standard) in private and public sectors will be our population of interest because this is the most susceptible group exposed to tobacco use, and the trends show that at this age, most of the time, the population starts using tobacco, so by using this group as our population we can gather much precise information in a short period of time and with much lesser expenses in a setting of limited field staff.

ideally, for any surveillance system, we need to collect the data continuously, but as it requires a great deal of time and resource allocation, so the best period for the collection of data in the above setting is during the spring season(March through May) so that adequate information will be collected in a short period of time

We have to gather information about Age at starting the tobacco products, Gender, trends of tobacco use among adolescents, types of tobacco products used, Smoking status(never, current, old, recently started), knowledge about tobacco hazards, and benefits of cessation of its use.

Certain stakeholders are required in order to run a proper surveillance system, which in our setting will be the ministries of health, regional public health staff, Principal of high schools, religious scholars, Cultural leaders, health counsellors, health administration, non-governmental organizations, funders, researchers, tribal or territorial government agencies, Smoke-free Coalition Coordinator, Smoke-free Coalition member and others (patients, family members etc.).

Data Sources:

Global Youth Tobacco Survey

National Youth Tobacco Survey

Gp clinics

Hospital records

School health education profiles

School Health Policies and Practices Study

State tobacco tracking and evaluation system

Data collection instruments:

Surveys

A detailed questionnaire with 56 core questions designed according to GYTS guidelines, including questions like(Knowledge and attitudes of young people towards cigarette smoking, Prevalence of cigarette smoking and other tobacco use among young people, Role of the media and advertising in young people's use of cigarettes

Access to cigarettes, Tobacco-related school curriculum, Environmental tobacco smoke (ETS), Cessation of cigarette smoking, etc.)

Interviews amongst the more intensive habitual tobacco users. (U.S. Department of Health and Human Services, 2014)

Field Test Methods:

It is very difficult to dig out information about tobacco use in groups like young pregnant girls, so we can use some laboratory methods for it. Cotinine is one of the common metabolites used as a biomarker for the detection of nicotine in the body in certain fluids like blood, urine, saliva, etc., so it can be measured in order to detect whether the person is exposed to smoking or not.

The data should be disseminated at least once a year so that the population remain aware of the efforts they made in declining the current issue results in some improvement or not and hence, more of the adolescents encouraged to quit tobacco use if results are positive and if those are negative, one should struggle more to bring about a positive change.

The data should be disseminated on a local level to the Ministry of Health officials, NGOs, donor agencies, policymakers and decision-makers, health care providers, the general population, researchers, public health specialists, epidemiologists, etc. and on international levels like WHO, CDC, etc.

Now, at the end of this system, we can drive some figures in which area we work hard and what benefits we get at the end, how our interventions play a role in achieving our targets, and what more is required to change the habits of our adolescence regarding this preventable cause of death, we can

design further health-related programs and policies regarding the issue, authenticate use of already available data, we can establish a foundation by facilitating for the more fruitful research works.

References

Centers for Disease Control and Prevention. (n.d.). Cigarette smoking and tobacco use among people of low socioeconomic status. <https://www.cdc.gov/tobacco-health-equity/collection/low-ses.html>

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