Research Paper

Health implications of smoking in Pakistan

By Ms. Palwasha Nawaz, Project Executive, Center for Global & Strategic Studies (CGSS), Islamabad

Published on 26th January 2021
# Table of Contents

Abstract ..................................................................................................................................................3  

1. Introduction......................................................................................................................................3  

Objectives ...........................................................................................................................................5  

2. Health Implications of Tobacco: A Detailed Analysis .................................................................6  

Cardiovascular Diseases ......................................................................................................................8  

Cancer ..................................................................................................................................................9  

Health Repercussions of Secondhand Smoke .....................................................................................10  

3. Health Implications of Tobacco in South Asia ...........................................................................11  

4. Tobacco’s Health implications in Pakistan ..................................................................................12  

Cardiovascular Diseases ....................................................................................................................13  

Cancer ................................................................................................................................................13  

Tuberculosis ........................................................................................................................................14  

Health Costs .......................................................................................................................................15  

Psychological Impact ..........................................................................................................................16  

Health Levy on Tabaco .......................................................................................................................17  

5. Policy Recommendations ..............................................................................................................18  

Massive Anti-tobacco Campaigns ......................................................................................................18  

Issuance of Graphic Warnings on Cigarette Packs ...........................................................................19  

Construction of RehabilitationCcenters and National Helpline ......................................................20  

Ascertian Psychological Impact ..........................................................................................................20  

References:..........................................................................................................................................21
Abstract

Tobacco consumption is one of the chief sources of several severe health repercussions. It is also a major contributor to preventable deaths. The World Health Organization has characterized it as a global epidemic and has devised a number of tools and strategies to control its growing usage. About 80% of consumers live in developing countries, thereby augmenting the health costs for these financially constrained economies. The study aims to throw light on the health complications caused by excessive use of tobacco products. Initially, the study provides a detailed analysis of the health risks posed by tobacco products across the globe, and the second part is focused on South Asian region particularly Pakistan. It concludes that the tobacco addiction is fatal based on its physical and psychological ailments. The study suggests that mass anti-smoking campaign is needed in addition to strict policy measures, to nip this infestation in the bud. The formation of rehabilitation centers is also a significant step in this regard. There is also need of a comprehensive study to decode the psychological impacts.

1. Introduction

Tobacco usage is considered as one of the major sources of death owing to its disastrous health repercussions (World Health Organization 2008). Tobacco results in more than 8 million deaths annually, which includes 7 million smokers and 1.2 million non-smokers (World Health Organization 2008).
Health Organization 2020). It is termed as a global epidemic by the World Health Organization (WHO). Thus, tobacco has been characterized as a harmful substance in any proportions consumed. Every year, several warnings are being issued by WHO and other leading organizations including Bloomberg and Bill and Melinda Gates foundation to urge the countries to erect instruments to curb tobacco consumption. They are also advising the communities to come together to fight against excessive tobacco usage. Although, it is preventable, yet, it is playing havoc with human health across the world. Hence a global response is required. In this context a global action plan has been launched by different organizations to discern the current trends of tobacco consumption, apply appropriate steps to curtail it and monitor the situation continuously to ensure that its short and long term implications could be controlled effectively (World Bank Group 2019).

A number of strategies and tools have been suggested by WHO and organizations to control the growing tobacco usage successfully which encompasses strict tax regime, comprehensive campaigns, education program and political economy instruments (World Health Organization 2019). Although these steps have resulted in major accomplishments, yet, the situation remains precarious. The emergence of Covid-19 has not only introduced complex changes in trends of tobacco consumption but has also been the source of new health complications among its users, thereby enhancing their susceptibility to this infection (Siddiqi et. all 2020, p. 2).

While analyzing the statistics, a horrendous reality surfaces that the consumption of
tobacco is, in fact, not equally distributed across the globe. Among the 1.3 billion consumers the majority of these unfortunate people live in developing and least developed countries, thereby enhancing the health costs for these underdeveloped states (Rafique et al. 2018, p. 11). The healthcare sectors of these low- and middle-income countries already suffer from lack of financial resources coupled with weak administrative structure. The current pandemic has further shaken the healthcare industry to its core where all efforts are being subjected to disburse the virus vaccine on a global scale. In such situation, the extensive use of tobacco products is only increasing the global burden of diseases (Viz Hub 2021).

Objectives

Despite of several efforts by world organizations, the health issues of tobacco and its related products have remained persistent. While discussing the health risks posed by the use of tobacco products across the world in general and Pakistan in particular, the study tries to find some appropriate policy measures required to curtail the growing use of tobacco products in all segments of society. The more specific objectives of study are;

1. To find health complications which arise due to use of tobacco products
2. To discuss its overall impact on the health sector

www.cgss.com.pk
info@cgss.com.pk
2. Health Implications of Tobacco: A Detailed Analysis

For the past few decades, tobacco addiction has remained a cause of concern for health experts. Despite of efforts made by several organizations and legislative institutes, the tobacco consumption has posted a positive trend, which turned the tobacco industry into one of the most profitable industry around the world. CNN Business asserts that tobacco companies, established in US, have projected an annual return of about 20.6% for the last half of century (Houholder 2019). No other industry has ever come close to such a huge profit margin. It is the result of the prevalence of smoking in all countries especially in low- and middle-income countries. WHO has found evidence that increase in smoking creates health risks, thereby increasing the probability of cardiovascular diseases, cancer, tuberculosis and other psychological ailments across the globe (World Health Organization 2020). WHO has shortlisted a number of fatal diseases which are caused by tobacco products (Graph-1).

![Graph showing tobacco use is a risk factor for six of the eight leading causes of death in the world]

Source: WHO Report on the global tobacco epidemic: The Mpower package
The Global Burden of Disease, a major international publication researching on different causes and their impact on health, suggests that about 8 million people died prematurely in 2017 only due to extensive smoking (Ritchie & Roser 2019). The research emphasizes on the fact that out of 15% of deaths across the globe, about 13% occur due to smoking while the rest due to the impact of secondhand smoke, are attributed to smoking alone. According to their survey, smoking increases the risk of multiple diseases (Graph-2).

Source: Global Burden of Diseases, 2017
Risks from Smoking

Smoking can damage every part of the body

**Cancers**
- Head or Neck
- Lung
- Leukemia
- Stomach
- Kidney
- Pancreas
- Colon
- Bladder
- Cervix

**Chronic Diseases**
- Stroke
- Blindness
- Gum infection
- Aortic rupture
- Heart disease
- Pneumonia
- Hardening of the arteries
- Chronic lung disease & asthma
- Reduced fertility
- Hip fracture

**Cardiovascular Diseases**

The constant exposure to tobacco could increase the probability of heart attack and stroke. With continued smoking, the blood vessels are damaged extensively, thereby increasing the chances of clotting (John Hopkins Medicine n.d.). Apart from that, smoking could also increase blood pressure which, in turn, could increase the chances of heart related diseases. The statistical data from WHO and World Health Foundation suggests that around 1.9 million fatalities occurring per annum due to heart attack are caused by tobacco products only (World Health Organization 2020). This encapsulates
about one in five of all deaths occurring due to heart related issues. Additionally, experts assert that people who smoke are two to four times at greater risk of heart attack and stroke as compared to those who avoid smoking (John Hopkins Medicine n.d.).

**Cancer**

Apart from heart disease, smoking cigarettes could also enhance the probability of cancer. Center for Disease Control and Prevention (CDC) USA, suggests that smoking also increases the chances of cancer anywhere in human body including Oral cavity, Lungs, Liver, Pancreas, Bladder, Kidney and Colon. CDC also believes that the smokers have a shorter life expectancy as compared to non-smokers. Further, CDC highlighted that quitting smoking altogether could reduce the risk of mortality due to any tobacco related diseases by 90% (Centers for Disease Control and Prevention n.d.). The data in table-1 reveals the total number of mortalities due to smoke induced cancer. From here, it is quite clear that tobacco consumption increases the chance of lung cancer, hence, increasing the mortality rate of tobacco related diseases:
Source: CDC

Health Repercussions of Secondhand Smoke

The most appalling fact of tobacco usage is its disastrous impact on surrounding individuals and environment. The frequent use of tobacco products does not only affect the health of smoker, it has a horrendous impact on individuals exhaling the tobacco smoke. This phenomena, known as secondhand smoke, causes nearly 34, 000 premature deaths per annum in USA alone (Centers for Disease Control and Prevention n.d.) and around 1.2 million at global level. The cigarettes comprise of numerous toxic chemicals which make its smoke extremely lethal. Mere breathing in this smoke could create severe complications for functioning of heart and vascular system. Thus, the individuals who are consistently exposed to secondhand smoke at their home or work places are at a greater risk of heart attack or stroke by the age of 25-30 years. Although governments are taking step to control smoking in indoor settings, yet, more than 1% deaths around the world occur due to secondhand smoking, hence, indicating a need
to take this grave matter seriously.

3. Health Implications of Tobacco in South Asia

Although majority of tobacco consumers are present in low and middle level economies, yet, around 60% of the population consuming cigarettes daily, resides in Asia (Rafique et al. 2018, p. 11). This high rate does not only contribute to a burden on healthcare sector, it also causes damage to the state exchequer. GBD suggests that the death rate from tobacco induced diseases has decreased in developed countries while it is on a constant rise in under developed states (Ritchie & Roser 2019). Hence, it appears that low or middle level economies are still suffering at same rate from consumption of tobacco products as before. Due to such frequent smoking, the tobacco related deaths are highest in Asia and Eastern Europe.

The South Asian region, in particular, is the most troubled area affected by high rate of smoking cigarettes. A number of factors including lax implementation of tax laws, influence of tobacco industry proponents, lack of awareness of excessive smoking hazards and excessive unchecked marketing campaigns by tobacco companies play a substantial role in enhancing the seriousness of this issue. The following graph depicts the performance of each state in this region in terms of curtailing tobacco related products and their disastrous health impacts:
Source: IHME, global burden of disease (GBD)

4. Tobacco’s Health implications in Pakistan

Among the South Asian nations, Pakistan is included in the 15 states of the world bearing the worst impacts of the smoking related health problems. Bloomberg report has projected that about 22 millions population of Pakistan consumes tobacco related products daily. While looking at the gender specific data, it is observed that the male consumers surpass the figure of 30% while females constitute of about 5% of the said figures (Burki et. al. 2013, p. 2). It is matter of grave concern. The Tobacco Atlas illustrates that more than 160,100 Pakistanis lose their lives annually due to excessive smoking. However, the trend of tobacco consumption keeps on increasing daily (The
Tobacco Atlas n.d.). The following graph represents age wise distribution of these smokers:

![Graph showing age wise distribution of smokers]

Source: *WHO*

**Cardiovascular Diseases**

The major health risk posed by the prevalent cigarette consumption is cardiovascular disease. The number of Pakistanis dying from tobacco use is relatively high. According to official statistics release by CMH Lahore, about 30 to 40% of deaths occur due to cardiovascular disease and tobacco induced heart attack or stroke is one of the major reasons. Thus, about 200,000 people die annually, with 12 Pakistanis suffering fatality every hour (Qasim 2018). The major reason of this rising rate is youth indulged in frequent smoking, causing heart diseases as early as 40 years of age.

**Cancer**

The number of cancer patients, especially those affected by lung cancer, is on a rise due
to increasing incidences of smoking. In this context, GLOBOCON placed lung cancer as the third most common cancer in Pakistan (Majeed, Azeem and Farhan 2019). Other than that, as per the statistics released by Pakistan Medical Association, 1.5 million cases of oral cancer are being reported every year (Burki et. al. 2013, p. 20). The figures given by the Pakistan Chest Society indicate that around 5% of the individuals suffering from Chronic Obstructive Pulmonary Disease (COPD) are smoking addicts (The News 2019). These horrifying figures depict the extent to which tobacco prevalence is affecting the health of society. The following graph depicts the escalation of cancer cases in Pakistan with frequent usage of tobacco:

![Graph showing association of tobacco with lung and oro-pharyngeal cancers]

Source: PHRC website

**Tuberculosis**

Tobacco smoking and Tuberculosis (TB) transmission have an established directly proportional relation with each other. In Sindh alone, Siddiqui et al. (2011) has
illustrated that smoking is a major factor causing an abrupt increase in TB where about 48.8% people addicted to tobacco have contracted this lethal disease. During another research conducted by Khanum et. al (2019) in Balochistan, it was found that smoking has contributed substantially in spreading TB across the province. Overall, a spike is observed in tobacco usage in Pakistan, due to which, it is ranked 6th among the TB burdened states (Qasim 2018).

Health Costs

The tobacco prompted diseases do not only have health implications but are also a major burden on public exchequer and personal income. These diseases attribute to about US $1.3 billion annually, with costs on cardiovascular diseases alone mounting to US $0.9 billion (Saqib et. al 2020, p. 316). This is a huge amount for a country like Pakistan where financial resources are already limited for development projects. Majority of cost implications occur due to lung cancer and cardiovascular diseases, as portrayed by the following table:
<table>
<thead>
<tr>
<th>Illness</th>
<th>Currency</th>
<th>Health Care Cost</th>
<th>Other costs</th>
<th>Productivity losses</th>
<th>Total costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA Lungs</td>
<td>Rs.</td>
<td>70125 (79200)</td>
<td>40400 (76540)</td>
<td>10500 (15850)</td>
<td>128425 (173300)</td>
</tr>
<tr>
<td></td>
<td>USD</td>
<td>501.6 (566.52)</td>
<td>288.98 (547.50)</td>
<td>75.10 (113.38)</td>
<td>918.63 (1239.63)</td>
</tr>
<tr>
<td>COPD</td>
<td>Rs.</td>
<td>21000 (39099)</td>
<td>4420 (7800)</td>
<td>11600 (12000)</td>
<td>39037.5 (55925)</td>
</tr>
<tr>
<td></td>
<td>USD</td>
<td>150.21 (279.68)</td>
<td>31.61 (55.79)</td>
<td>82.97 (85.84)</td>
<td>279.23 (400.04)</td>
</tr>
<tr>
<td>CVDs</td>
<td>Rs.</td>
<td>17804 (45000)</td>
<td>4000 (6100)</td>
<td>7500 (19420)</td>
<td>30640 (68046)</td>
</tr>
<tr>
<td></td>
<td>USD</td>
<td>127.35 (321.89)</td>
<td>28.61 (43.63)</td>
<td>53.64 (138.91)</td>
<td>219.17 (486.74)</td>
</tr>
<tr>
<td>Total</td>
<td>Rs.</td>
<td>27000 (58560)</td>
<td>5000 (12100)</td>
<td>10000 (15200)</td>
<td>42566 (93074)</td>
</tr>
<tr>
<td></td>
<td>USD</td>
<td>193.13 (418.88)</td>
<td>35.76 (86.55)</td>
<td>71.53 (108.73)</td>
<td>304.47 (665.77)</td>
</tr>
</tbody>
</table>

Inter quartile range in parenthesis, CA Lungs: Lung cancer, COPD: Chronic obstructive pulmonary disease, CVDs: Cardiovascular diseases

Source: Saqib et. al 2020, p. 316

Psychological Impact

A problematic factor of tobacco addition is its psychological impact on children. According to various studies, children who are frequently exposed to toxic secondhand smoke are prone to mental health issues (Peeples 2010). Experts have expressed their concerns on various occasions that cigarette smoking has immeasurable social, emotional and behavioral influence over children and adolescent. Unfortunately, in Pakistan, this is the least researched topic. In the local environment, where the physical ailments caused by smoking are taken lightly, the psychological ailments stand largely ignored. This research gap is another cause of concern for policy makers since comprehensive anti-smoking policies could not be structured without adequate knowledge of the seriousness of problems being faced in society.
Health Levy on Tabaco

Pakistan is signatory to World Health Organization to take effective measures to reduce the demand of cigarettes by applying tools of price and taxes. WHO has recommended taxes up to 75% of the retail price of tobacco products to discourage its use (World Health Organization 2020). However, with a score of 0.88 out of 5 on cigarette scorecard, the situation does not look good for Pakistan (Chaloupka et al. 2020, p. 27). Various institutional and resource constraints have played their role in the failure to control tobacco prices in country, resulting in lowest average price of a cigarette pack.

Pakistan also committed under the target of 3.4 of Sustainable development Goal to reduce non-commutable disease by 1/3 till 2030. By keeping in mind these commitments Federal Cabinet of Pakistan in May 2019, approved a tax levy on tobacco 10 PKR on each cigarette pack of 20 sticks. It was also mentioned that illicit trade and illegal production will also be curbed. Unfortunately, it is still in process. The huge influence of tobacco industry over legislative bodies is a major factor of delay. It is the chief contributing factor towards growing use of tobacco products. Due to such influenced policy making, Auditor General of Pakistan (AGP) has reported an immense increase in the number of illegal trade of cigarettes which amounts to about 9% of the total volume being consumed locally, does not contain any graphic warnings as
mandated by local law (Chatha 2018). These factors are presenting double edged problems. On one side it is contributing to increase of diseases and on other hand it is a loss to national revenue. Human Development Foundation pointed that it costed Pakistan around 55 billion PKR during the last year (Tribune, 2021). Hence, there is urgent need to implement the decision of cabinet.

5. Policy Recommendations

While analyzing the gravity of situation, it is concluded that Pakistan is facing crucial healthcare and financial issues due to increasing trend of smoking cigarettes. The country is in the dire need of a comprehensive change in its taxation and planning policies so as to curtail the growing use of tobacco, especially among youth. In this regard, the situation needs to be monitored closely so as to ensure that the influence of tobacco industry does not have any effect on the policies being implemented by legislative institutes.

Massive Anti-tobacco Campaigns

All forms of print and social media have a huge influence over common public. Therefore, any tobacco cessation campaigns launched on such modes of communication would be of utmost significance. Pakistan needs to launch some massive anti-smoking campaigns where the audience are educated in a meaningful manner. Ads comprising of graphic warnings and pathos would be extremely successful in this scenario where inspirational stories and quotes are narrated to the youth. Although numerous campaigns have been a part of national tobacco control
program previously as well, yet, the short messages demonstrated on mass media would have a more effective reach out than before. Different wide-ranging studies intended to cover the overall negative impact of tobacco related products could be published for changing smoking trends prevalent within society.

Another effective policy measure in this regard is the enforcement of complete ban on advertisement of tobacco products on all modes of communication. Although Pakistan has taken some steps for banning the direct advertisement campaigns on print and digital media, yet, there are loopholes in laws exploited excessively by tobacco companies. Although the advertisement of tobacco products is completely banned on local print and digital media, however, no restrictions are yet placed on encouraging the online sales of cigarettes which is a necessity in the current era of social media. Furthermore, use of false and deceptive means to promote tobacco products is not discouraged which leads to the promotion of highly toxic products as mild nicotine merchandise. Strict laws should be crafted and their implementation needs to be monitored closely to bring some substantial changes in sales of tobacco products.

**Issuance of Graphic Warnings on Cigarette Packs**

Through an initiative taken by the WHO, it was made mandatory for tobacco companies to display graphic health warnings on each pack. In compliance with the ratification of WHO mechanism to end excessive use of tobacco, Pakistan made it mandatory to cover
around 60% of pack with health warnings. The basic purpose was twofold, i.e. to educate people on possible health deteriorations caused by smoking and to discourage the audience from indulging in excessive cigarette smoking. However, the cigarette packs which are smuggled do not follow these laws. Hence, irrespective of volume, the authorities need to control the illicit trade and ensure that all local as well as international brands comply with the law of displaying graphic warning on each pack.

**Construction of Rehabilitation Centers and National Helpline**

One of the best practices for addiction recovery is to establish rehabilitation centers for controlling nicotine addiction. Studies show that most of the smokers aspire to quit smoking once and for all but gradually relapse and lose motivation to leave this addiction. In Pakistan, no rehabilitation center (maybe there is any but we could not find) is present for curtailing tobacco addiction. Additionally, the absence of a national helpline shows the lack of seriousness towards national tobacco control program. The presence of rehab and national helpline is mandatory for an effective local withdrawal program. In this regard, the civil society could also aid government in setting up these setups through provision of financial or technical aid.

**Ascertain Psychological Impact on Children**

The research gap presents in ascertaining the physical and psychological impacts of tobacco smoking should be covered with immediate effect. In order to formulate adequate policy measures, it is essential to conduct thorough research for all the possible effects of excessive tobacco usage. Special attention should be given to the
psychological impact on children and adolescent to control the effects of peer pressure which could influence them towards tobacco addiction.

References:


Centers for Disease Control and Prevention n.d., *Smoking and tobacco use*, National Center for Chronic Disease Prevention and Health Promotion office on Smoking and Health, Atlanta viewed 22 January 2021,


January, viewed 22 January 2021,

https://www.kpcnews.com/columnists/article_6c50ebc6-335e-5a71-b980-0d6e05ae4082.html.

John Hopkins Medicine n.d., Smoking and cardiovascular diseases, John Hopkins Medicine, The John Hopkins University, viewed 22 January 2021,


Qasim M. 2018, ‘Tobacco-one of the leading causes of heart diseases’, The News, 30 May, viewed 22 January 2021,


The News 2019, ‘World lungs day: smoking major cause of lungs diseases’, The News, 26 September, viewed 22 January 2021,


The Tribune, 13 January, 2021,


Viz Hub 2021, GBD Compare, Viz Hub, University of Washington.


World Health Organization, World Heart Federation,


World Health Organization 2020, ‘Tobacco responsible for 20% of deaths from coronary heart disease’, *World health organization*, 22 September, viewed 22 January 2021,