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# OPEN ACCESS PACK FEATURES AND AVAILABILITY OF ILLICIT TOBACCO PRODUCTS VIA THE INTERNET IN PAKISTAN

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### ABSTRACT

Objective: To assess the availability of illicit tobacco products in online and local market in Pakistan.

Methodology: We conducted a cross sectional study involving Pakistani online retailers. We used the "Google Search" function to identify the internet vendors, limiting the search to websites form Pakistan only. Out of a total of 100 websites, we selected 25 websites to place orders for tobacco products. These sites were selected on the basis of the volume of traffic to these sites. Out of the 25 selected websites only eight were functional at the time of data collection, so orders for the products were placed on these websites only. Additionally, some products were also procured from the local market in Peshawar for comparison with the products that were procured online. We analyzed each product using five-point criteria that has been used previously in the Pakistani context to assess illicit products and was developed in collaboration with the Tobacco Control Cell of Pakistan. SPSS Version 20 was used to analyze data in the form of frequencies and percentages.

Results: Both Online and local products were found to be identical as per the 5 points of criteria with an almost equal percent of pictorial/text health warnings, under age warning, manufacturer's name details and barcode/ retail price. Alarmingly just 31% and 33% of the products found online and locally respectively, had a pictorial health warning. 38% of the products procured online and 56% of the products sourced from the local market had warnings against under-age sale.

Conclusion: A larger variety of tobacco products is available online as compared to the ones in local market, with a majority of the products being illicit.

Kevwords: Illicit Sale; Tobacco Products; Local Market; Online Sale; Counterfeit Tobacco.

#### ■ INTRODUCTION

The global tobacco pandemic is one of the major public health challenges of our time affecting millions of people across the world, with the estimated death toll attributed to the use of tobacco reaching 8 million per year by 2030.1 Among the 1.3 billion tobacco users worldwide, over 80 percent live in low- and middle-income countries, where the burden of tobacco-related morbidity and mortality is the heaviest. The increasing numbers of cigarette smokers and other tobacco product users in many low and middle-income countries has been attributed to population overgrowth and innovative tobacco industry marketing.2 Globally around 24 million youth aged between 13-15 years consumes smoked tobacco variants while 13 million uses smokeless tobacco products.

The prices of tobacco products in Pakistan are among one of the lowest in the world, favoring more consumption.3 Tobacco most commonly consumed in

Pakistan can be divided into three main categories; smoked, smokeless (chewed) and sniffed.4 The WHO estimates that 32.4% males and 5.7% females in Pakistan are current tobacco users.5 Shisha, a form of smoked tobacco, has also become a growing trend among the Pakistani youth and as per a study reported from Karachi in 2008, regular shisha consumers included 43% males and 11% female university students.<sup>6</sup> Approximately 8% of the population in the country also consumes smokeless tobacco in various forms.7

A significant factor contributing to the growing tobacco pandemic is the sale of Counterfeit/illicit tobacco products. Counterfeit/illicit tobacco products being sold online refers to products that are either manufactured or sold without the consent of the rightful owners, are intended to misguide consumers, are evading tax and do not follow approved practices related to distribution, sale, or purchase of tobacco products, as outline in the national laws.8 There has been a considerable increase in the sale of these tobacco products online due to certain factors; one being that these illicit products are not taxed, unregulated by law, carry no health & age warnings, and are priced lower than retail.<sup>9</sup>

In 2013, Pakistan ranked 4th highest in Asia on the basis of the share of the illicit cigarette trade market. In 2014, more than 19.5 billion cigarettes sold in Pakistan were illicit (online plus via local vendors). <sup>10</sup> On average, more than 1.6 billion illicit cigarettes are sold in Pakistan every month. <sup>10</sup> During the last six years, the illicit segment has grown by 43.5% and the tax-paid cigarette volume has declined by 11%. On average more than 1 billion illicit cigarettes are annually added to the illicit segment in Pakistan. <sup>11</sup>

Although, there is evidence of availability of illicit tobacco products in the physical retail environment<sup>17</sup>, literature on the availability of illicit tobacco products in the online retail environment is nonexistent. We conducted this study to assess the availability of illicit tobacco products in Pakistan via the internet and compare the pack features of the products available online and those available in the physical market.

#### METHODOLOGY

We conducted a cross sectional observational study from Dec 2019 to June 2020. Data was collected from Pakistan based online retailers/websites, which were active and selling tobacco products, at the time of data collection. Karkhano market Peshawar was chosen to acquire the local tobacco products as it is considered a hub for cross border illicit tobacco trade given its vicinity to the Pakistan-Afghanistan border.<sup>12</sup>

We used a Non probability convenient sampling scheme to select the online vendors. Websites based in Pakistan were searched through Google and Yahoo Search Engines. The most popular websites with high online traffic/hits were selected. These hits were checked through the "worth of web" and the "similar web". These are online analytics-based resources that rank websites on criteria like revenue estimation (per day, per month & per year), engagement rate, traffic ranking, keyword ranking, and traffic source of the websites. Additionally, Google search and yahoo were used to locate some of the websites.

A total of 25 websites selling both smoked and smokeless tobacco products were located and selected on the basis of popularity and high online traffic. 8 out of those 25 websites, were finally included in the study because they were active at the time of data collection and the rest were excluded because they were either blocked or went out of business. Orders for tobacco products were placed at these websites by the research team using original identity and addresses for the purpose of delivery of the products. Once the products from the online vendors were received, we procured the same products from the physical retailers in Karkhano market, Peshawar. The physical vendors are all located in in one market and all these shops were approached to collect the tobacco product samples.

The pack features of the products ordered online and purchased from the local market were then analyzed using five-point criteria of illicit products developed for an earlier study conducted in Islamabad, the capital of Pakistan.<sup>19</sup> The criteria include the presence or absence of; pictorial health warning, health warning in text, under age sale prohibition warning, retail price printed on the packet/ tax stamp, details of product's manufacturer. Based on these packaging criteria, we compared the products ordered online with those bought from local market vendors. A product was rendered illicit if its packaging was found lacking on any single one of these five criteria. Two researchers assessed each product independently and

then compared notes. Any differences between the two were discussed with a senior author whose decision was considered final

Ethical approval was obtained from Khyber Medical University. The IRB number allocated was DIR/KMU-EB/IT/000554. After approval from the ethical review board, to-bacco products were purchased and handed over to the lead author. MS Excel was used to record data from the checklists and tables. The data was then transferred to SPSS 22 for descriptive analysis, presented in form of tables using frequency and percentages.

#### ■ RESULTS

At the time of data collection, 8 out of the 25 selected Pakistan-based websites were active and selling tobacco products, hence, included. Products were ordered by the participants as per devised methodology through those websites. Fifteen products including a smoking pipe and a cigarette lighter were received. Received products were included in the study and the others which couldn't be acquired were excluded. These were then analyzed for being licit or illicit as per the agreed criteria (Table 1).

Thirteen tobacco products received online included 3 (23%) smokeless and 10 (77%) smoked products respectively. Total 4 (31%) tobacco products had pictorial warning while 9 (69%) were without it. 10 (77%) products had a health warning in text mentioned while it was missing on the rest of the 3 (23%) products. (62%) of the products were devoid of any warning against under-age sale or use. 12 products (92%) have had manufacturer name marked on them while one (8%) was without it. 11 (85%) products were found to have retail price mentioned while 2 (15%) were lacking the same.

Out of 13 products which were received online, 9 products found in the local market and were analyzed against the five-point licit/

Retail Price Men-tioned/ Price Barcode Yes Yes Yes Yes Yes Yes Yes 9 Yes 2 Yes Yes Yes Name of manufac-turer Yes Yes Yes Yes Yes 2 Yes Yes Yes Yes Yes Yes Yes **Underage Warning** Yes Yes 9 9 Yes Yes Yes 2 2 2 9 2 2 Health warning in text Yes Yes Yes Yes Yes 2 2 Yes 2 Yes Yes Yes Yes Table 1: Analysis of online products on the whole as per 5 points criteria in tabulated form Pictorial Health Warning Yes Yes Yes 9 2 Yes 9 2 9 9 2 9 9 (Smoke juice for e-cigarettes) (Imported cuban Mini cigars) (Imported flavored cigarettes) (Flavor for Hukkah/sheesha) (Imported cigarettes) (Imported cigarettes) Smokeless tobacco Smokeless tobacco (Imported cigarettes) Smokeless Tobacco (Imported cigarettes) (Imported Cigars) (Imported Cigars) (Imported Cigars) (Local cigarettes) **Product Type** Smoked Smoked Smoked Smoked Smoked Smoked Smoked Smoked Smoked Marlboro Gold White King Edward Cigars Cocca bean sticks Serie PARTAGAS Product name DavidOff Classic (Double packs) Marlboro Red Toscanello Monticristo Gold Leaf Dunhill Senator Mond Liqua S No. Ξ.  $\infty$ 10. 12. 13. 7. <del>. .</del>  $\sim$ 3 4. 5. 6. 9

Table 2: Analysis of local products on the whole as per 5 points criteria

S No.	Product name	Product Type	Pictorial Health Warning	Health warning in text	Under age Warning	Name of manu- facturer	Retail Price Mentioned/Price Barcode
1.	Dunhill	Smokeless tobacco (Flavor for Hukkah/sheesha)	Yes	Yes	No	Yes	Yes
2.	Liqua	Smokeless tobacco (Smoke juice for e-cigarettes)	Yes	Yes	Yes	Yes	No
3.	Senator	Smoked (Imported cigarettes)	No	Yes	No	Yes	Yes
4.	Davidoff Classic (Double packs)	Smoked (Imported cigarettes)	No	Yes	No	Yes	Yes
5.	King Edward Cigars	Smoked (Imported Cigars)	No	No	No	Yes	Yes
6.	Mond	Smoked (Imported flavored cigarettes)	No	Yes	Yes	Yes	Yes
7.	Gold Leaf	Smoked (Local cigarettes)	Yes	Yes	Yes	Yes	Yes
8.	Marlboro Red	Smoked (Imported cigarettes)	No	Yes	Yes	Yes	Yes
9.	Marlboro Gold White	Smoked (Imported cigarettes)	No	Yes	Yes	Yes	Yes

Table 3: comparison of online versus locally acquired products according to the five-point criteria.

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Criteria	Products purchased online	Products purchased locally	
Product type (Smoked)	10/13 (77%)	7/9 (78%)	
Product type (Smokeless)	03/13 (23%)	2/9 (22%)	
Pictorial Health warning	4/13 (31%)	3/9 (33%)	
Text Health Warning	10/13 (77%)	8/9 (89%)	
Underage Warning Present	5/13 (38%)	5/9 (56%)	
Manufacturer Name present	12/13 (92%)	9/9 (100%)	
Retail Price Present	11/13 (85%)	8/99 (89%)	

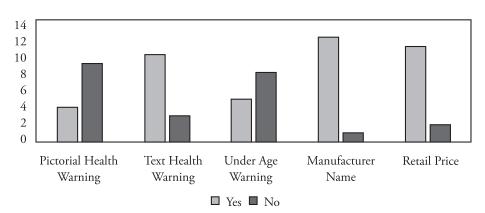


Figure 1: Analysis of online products on the whole as per 5 points criteria in graphical form

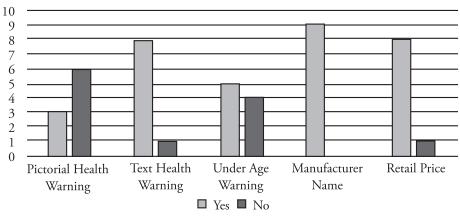


Figure 2: Analysis of local products on the whole as per 5 points criteria

illicit criteria (Table 2). The four products that were unavailable in the local market Cocoa bean smokeless sticks, Tosca Nello cigars, Montecristo mini cigars and Serie Partagas Cuban cigar.

Out of those 9 products 7 (78%) products were smoking tobacco products and 2 (22%) were of the smokeless tobacco type. 6 (67%) of the products had no pictorial warning, while 8 (89%) had a textual health warning printed on them. Total 5 products (56%) had under age warning mentioned while 4 products (44%) were devoid of one. Manufacturer's name was mentioned on all (100%) of the products. Retail price or barcode for price was mentioned on 8 (89%) products.

#### DISCUSSION

Our study highlights the issue of illicit to-bacco products availability in Pakistan, especially in the unregulated online retail environment. An overwhelming majority (>90%) of the tobacco products procured online were found lacking on at least one criterion, rendering them illicit. The corresponding products sourced from the local physical retailers were also overwhelmingly (88%) illicit. The on growing tobacco pandemic poses a threat to Pakistan's economy in more than one way. One being counterfeit products sold online, taking up manufacturer's share of money and another by evading tax.<sup>13</sup>

Despite the significant financial repercussions, it is the threat to the public's health that is by far the gravest sequelae of illicit tobacco products sale. Illicit products are often cheaper than licit products, resulting in a greater access to these products by the population. Consequently, burdening the country's economy by increasing disease load on government hospitals with limited resources.<sup>14</sup>

A great share of research done on illicit tobacco has been conducted in the United States of America and European countries on a global level, with very limited evidence generated from Asian countries especially Pakistan.<sup>15</sup>

A study conducted in North Carolina, USA was carried out to identify the number of websites selling cigarettes online in the USA and the sales and marketing practices adopted by the vendors. 16 It pointed out practices such as health and age warnings given on websites and inferred that only 28% gave health warnings and 88% gave under age warnings, in comparison we report that 80% of the packs that we studied had health warnings printed while only 39% yielded under age warnings.

Around 126 signatories to the FCTC have approved requirements for pictorial health warnings printed on cigarette packs and

other tobacco products (including smokeless tobacco products, and loose tobacco). Pakistan being a party to FCTC has made a requirement for the pictorial warning to cover 60% of the front and back of the pack. <sup>17</sup> Although the laws and regulations have been made, compliance to health warning requirements is still a major concern.

In countries like Brazil, Indonesia, Thailand and Viet Nam health warnings were partially found to be covered by tax stamps, In Saudi Arabia, pictorial health warnings were found to be culturally insensitive, hence, not implemented. Our study reinforced the above facts by finding that only 31% and 33% of the cigarette packs found online and locally, has had the picture-based health warnings respectively.

A consumer-based study carried out in Islamabad provides an elaborate picture of illicit trade in the capital of Pakistan but it was limited to one city only. <sup>19</sup> It has further probed the need to conduct such surveys and researches in other major cities of Pakistan, in order to gather reliable information to bring about reforms and introduce effective policies against illicit trade. It found 15.8% of the cigarette brands consumed in the federal capital were illicit. 88.8% of cigarette packs were noticed having pictorial health warnings. 88.8% of cigarette packs had textual health warnings in English and Urdu.

In contrast to our study which revealed 21% of products had pictorial warnings and 80% had health warnings in the text mentioned on online products and among local products, 33.3% had a pictorial warning while 90% a text health warning.

The Islamabad based study on illicit to-bacco showed that 88.9% of cigarette packs contained underage warnings on cigarette packs whereas in our study 39% of online products came with underage warnings printed on the packs and 56% of local products had under-age warnings mentioned on them. Moreover, as per the study conducted in Islamabad, approximately 10% packs did not mention price, while 97.9% had the name and address of the manufacturer printed on the cigarette pack.

In comparison our study found 85% of online products had retail price mentioned in the form of bar code with manufacturer's detail on 90% and in products procured locally retail price for the price were mentioned on 90% products with manufacturer's details on 100%. According to the survey none of the cigarette pack had any tax stamp, a finding similar to that of ours. This difference in pack features between products available online and those available in the physical retail environment makes a strong case for the regulation of online retailers to comply with the national tobacco control laws.

Our study has tried to fill the research gap on illicit tobacco products availability in the online retail environment, highlighting the lack of compliance of tobacco products that are available online, with the national regulations. It has further highlighted the dire need to formulate regulatory policies and laws applicable to the internet as 92.3% of the tobacco products being received were illicit. Our study, however, does have limitations owing to the non-probability sampling method that we have employed and the algorithms used by internet search engines to

make some websites easier to access than others, but given the lack of a sampling frame we have tried our best to include every active online vendor selling tobacco products in Pakistan.

# CONCLUSION

After an assessment of the availability of tobacco products online and their further comparison with the products in the local market, it can be concluded that a larger variety of tobacco products are available online as compared to the ones in the local market. Moreover, these products are mostly illicit and are non-compliant with the national laws or provisions of the FCTC to which Pakistan is a signatory.

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# **Author's Contribution**

HM conceived the idea, reviewed the literature, contributed in data collection, performed data analysis, and data interpretation, and wrote the manuscript. ZK and WA supervised the study. BA helped with data collection and analysis of data. NQ contributed in the literature search. GA reviewed and edited the manuscript before final approval. Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

# **Conflict of Interest**

Authors declared no conflict of interest

Grant Support and Financial Disclosure

None

# **Data Sharing Statement**

The data that support the findings of this study are available from the corresponding author upon reasonable request.