

**COPD 2018- Punjab smokes out E commerce sites for E cigarette sale: A case report from Punjab- Rakesh K Gupta, Department of Health & Family Welfare, India****Rakesh K Gupta***Department of Health & Family Welfare, India*

Electronic Nicotine Delivery System (ENDS) popularly known as e-cigarettes are highly addicting and potentially lethal products. It is mostly being used by children and youth because these are glamorized by the tobacco industry. Though not generally available in stores, they are widely promoted and sold through E commerce sites with discount offers. Sales are increasing sharply all over the world. Punjab was the first state in India to declare Electronic Nicotine Delivery System (ENDS) as unapproved under Drugs and Cosmetics Act in 2013. A circular was issued by Government of Punjab regarding declaration of manufacture and sale of ENDS as illegal. To counter the sale on the ecommerce site, Punjab Government had issued a demi-official letter to cyber-crime cell regarding the sale of E-cigarettes in 2016. Awareness notices were sent to various E commerce sites regarding the sale of E cigarette. District level Task Force effectively implements the ban through conducting raids at suspected point of sale, which is being monitored monthly by Deputy Commissioners of all Districts. Cyber Crime Cell identified the 26 E commerce sites that were selling the E cigarettes. Letter was sent to these sites regarding the blocking/ banning the sale of e cigarettes. After that No E commerce sites are selling E cigarettes in Punjab. The declaration by the Government of Punjab opens the way for other states to follow suit and prevent ENDS becoming an additional marketing strategy for tobacco companies.

There are well known issues with the use of tobacco. Tobacco is recognized as the trigger factor of serious disease and death from many respiratory infections<sup>2-4</sup> During a COVID-19 pandemic,

questions were raised about the clinical outcomes for smokers and if they are more vulnerable to infection and whether nicotine has been caused by eight million deaths every year due to cardiovascular disorders, lung disease, cancer and diabetes. Hypertension. One clinical trial was announced at the time of the writing for nicotine effects but no record of the study was found by 12 May 2020. Therefore, this analysis analyzes the literature available from peer reviews on the relation of smoking with COVID-19, including one) the risk of SARS-CoV-2 infection; 2) COVID-19 hospitalization; and 3) the seriousness of COVID-19 outcomes among hospitalized patients, such as admission to ICUs, ventilative use and mortality.

The inclusion criteria were met by 36 peer-reviewed reports. All studies have been done in English. No cigarette use and the risk of illness or hospitalization were investigated by anyone. There have been a total of 26 observational studies and eight meta-analyses. The prevalence of smoking in hospitalized COVID 19 patients has been confirmed by all observational studies. In two metadata studies (between six and 13 studies), a pooled prevalence in hospitalized patients was identified.

No peer-reviewed studies are currently available that estimate the risk of COVID-19 hospitalization among smokers. However, 27 observer studies have shown that 1,4-18,5% of adults hospitalized were smokers. 8-32 There have been two meta-analyses that pool the prevalence of smoking in hospitalized patients in Chinese-based research. The Emami et al. Meta-analysis analyzed data for 2986 patients and found a pooled prevalence of

7.6% (3.8% -12.4%) while 5960 patients obtained an empirical smoking data from Farsalinos et al. 34, showing a pooled prevalence of 6.5%.

No meta-analysis found included nine reports. One of these studies recorded observer data in the United States for 7162 hospital and outpatient individuals, but did not provide any association statistical study. 10 The statistically significant relationship between smoking and disease severity (OR 3,5 (95-% CI 1,2–10,2) has been confirmed by another 323 patients in Wuhan, China<sup>15</sup> Kozak et al. 41 of the 226 patients who received smoking and ICU were found to be statistics-important in Toronto , Canada. Hospital-based research recording patient features can have many drawbacks, including poor data consistency. During emergencies, the compilation of smoking history is difficult and the severity of the illness is frequently vague and incoherent during studies. These experiments are also vulnerable to large samples. Characteristics of hospitalization depends on available services, access to hospitals, clinical procedures and potential external variables not included in the studies, depending on the country and context. In addition , most studies have not made methodological modifications to take the age and other conflicting variables into account.

Zhao et al.<sup>35</sup> analyzed the data from 7 studies and found a statistically relevant association among the patients (Odd's Ratio (OR) 2.0 (95 per cent CI 1.3 – 3.1) between the smoking and frequency of COVID-19.). If the largest Guan et al.<sup>13</sup> sample was removed from the research (sensitivity check to see if a particular study influences outcomes of the meta-analysis), the statistic significance vanished. However, when this same sensitivity test was applied an revised version of this meta-analysis, including another study remained important.

Lippi et al.<sup>38</sup> evaluated findings from five trials in a total of 1399 patients and found that smoking was

not relevant in terms of severity. Nevertheless, Guo et al., 39 subsequently found errors in the estimation that were also statistically important (OR 2.2 (95 percent CI 1.3 – 3.7). Vardavas et al.<sup>40</sup> evaluated data from five studies in a total of 1549 and estimated the relative risk that suggested a non-significant smoking / COVID-19 relationship. The same authors found, however, a statistically important link between the status of smoking and the primary endpoints of ICU, ventilation or death.

A analysis of clinical research has provided new evidence that smoking people may be less likely to develop a severe COVID-19 disease. Students from University College London reviewed 28 papers and found 'low than expected' the proportion of smokers in hospital patients. A Professor of Public Health has reported that "something strange is happening with smoking and coronavirus." One research found that the share of smokers among patients with COVID-19 in the United Kingdom was just 5%, a third of the national average of 14.4%.

The available data suggest at the time of this analysis that the smoking of patients diagnosed with COVID-19 is related to increased seriousness of the disease and death. Although it may be associated with gravity, in the peer-reviewed literature, no evidence was found for quantifying the risk of smokers of COVID-19 or of SARS-CoV-2 infection. Such issues include population-based studies.