As of 2013 around 35 million people (0.6-0.8%) used opioids illicitly as opioids have adverse effects like addiction to these drugs. In 2011, 4 million people in US used opioids recreationally and were dependent on them. As of 2015, opioids use has increased for recreational use and addiction are attributed to over prescription of opioid medications and inexpensive illicit heroin.

National drug overdose deaths have seen an exponential rise in the last 20 years. As of 1999 deaths were around 20,000 and by 2020 the deaths due to opioid overdose increased to 91,799(any death related to opioid use). In the recent years the overdose deaths and drug prescription rates are moving higher and almost parallel. In US, daily 650,000 opioid prescriptions are dispensed. As of now daily 78 people are being killed with the opioid drug related issues.

Primary overdose deaths include the use of Synthetic Opioids (primarily fentanyl) as almost 50% percent of the total overdose deaths related to the use of these synthetic opioids, and it had a 6-fold increase from 2015 to 2020. In the year 2020 16,416 deaths were just related to opioid prescription drugs. Out of all the total deaths 69% of the death people were males.

Deaths related to Heroin, natural and synthetic opioids continued to rise with 68,630 deaths in 2020. 68% percent of the total deaths involving Heroin also involved in synthetic opioids. In the paper “Correlation of Opioid with Prescriptions and Social Determinants” they extracted opioid prescription rates by extracting information on number of claims, generic drug name, number of medical beneficiaries who were prescribed, Zip code of health care providers. Database is build consisting of 30 million patients’ data. The opioid prescription rate is estimated by total opioid claims prescribed per the number of prescriptions prescribed these medications. By using the Multiple Death dataset (1999-2014), researchers calculated the total opioid mortality rate with the total opioid related deaths divided by the sum of all four mortality codes ICD-10.

Socio-economic data was extracted from the American Community Survey(2010-2014) estimates. For a total of 180,285,363 opioid prescriptions there were 46,665,037 beneficiaries and the annual opioid prescription rate is given as 3.86 claims per beneficiary. As per the data analysis they extracted top ‘5’ and bottom ‘5’ states with opioid prescription rates and opioid mortality rates. (this data is only based on the Opioid claims per beneficiaries). Vermont has the highest Opioid claims and Florida has the lowest Opioid claims per beneficiaries. The researchers of the paper to evaluate the potential association between opioid related mortality and prescription rate, used a multivariable regression model in which they have considered the socioeconomic parameters that is the ACS data from 2010-2014.

By the late 1990’s state medical boards have laid restrictions on the laws governing to the prescriptions of opioids for the treatment of chronic non-cancer pain which resulted in the increase in the number of prescriptions and by 2000’s other factors like intensive marketing by pharmaceutical companies, promotion of opioids by numerous physicians, myriad organization promoted opioids as effective pain relievers in chronic non cancer treatments increased in the opioid prescription rates.

Opioids usage also varied based on the geographic area. As of 2010 among people 12 years and above. The rate of illicit drug usage was 11.0% in west, 9.4% in the northeast, 8.2% in the Midwest, 7.8% in the south. The rate of drug usage is higher in the metropolitan areas with 9.4% in large metropolitan areas, 8.8% in the small metropolitan counties, 7.5% in the non-metropolitan counties as a group.

As of 2010, 1.5 million people of above 18 years who were on parole supervised from the jail had higher rates of dependence on or abuse of a substance. It is reported that in 2010, 10.6 million or 4.2% of people above the age of 12 reported driving under the influence of illicit drugs, among which the rate is higher among the individuals between 18 to 25 years. In the same period 15.7% of the people who used marijuana have used the drug for more than 300 days an year in the past year that means around 4 million Americans use marijuana on daily basis

Reference:

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