Opium Abuse is one of the biggest problems in the world, especially in Pakistan due to its marked psychotropic effects. Opium is a thick, gummy, brown substance obtained from Papaver somniferum L. It contains up to 30 different alkaloids among which morphine, codeine, thebaine have pronounced psychotropic effects due to which it is abused. Normally Opium is abused orally as raw opium. However, other dosage forms such as Tablets, Capsules, Syrups, and Powders have been developed by drug abusers. Hence, a study was conducted at the Narcotics Unit in Punjab Forensic Science Agency to identify the trend of abuse of opium in different dosage forms available in Punjab, Pakistan. Suspected opium samples were received from different submitting agencies and were analyzed by presumptive testing techniques using color tests and were confirmed by confirmatory techniques using Gas Chromatography-Mass Spectrometry. Opium alkaloids namely Morphine, Codeine, Thebaine, Papaverine, and Noscapine were identified in suspected dosage forms by comparison with reference standards. Hence, it was concluded that opium is also abused in the form of different Ayurvedic herbal dosage forms to cheat law enforcement agencies.

### INTRODUCTION
Opium Abuse is one of the biggest problems in the world, especially in Pakistan due to its marked psychotropic effects. Opium is a thick, gummy, brown substance obtained from Papaver somniferum L. It contains up to 30 different alkaloids among which morphine and codeine are the most important due to their effects like analgesia, euphoria, sedation, and cough suppression. Due to legal restrictions on its abuse in Pakistan, the abusers and drug traffickers have developed various dosage forms as an alternative source of drug abuse to cheat the Law Enforcement Agencies. Such different dosage forms include syrups, tablets, capsules, and powders.

### METHODS
Suspected Opium samples were received from various Law Enforcement Agencies including Police, Pakistan Customs, Anti Narcotics Force, Pakistan Railways Police, etc. The suspected Opium samples were presumptively tested by using color tests. Mecke reagent gave blackish green color, Marquis reagent gave brownish violet color, and Froehde’s reagent gave brown black color. Confirmation was done by Gas Chromatography-Mass Spectrometry technique. Suspected materials were dissolved in methanol separately. 1μL of the samples were injected in split mode (50:1) at 250°C in DB-5MS column (30m x0.250 mm x 0.25μm). Temperature programming was maintained 150°C for 1 min, then ramp up at the rate of 25°C/min until 300°C and maintained there for 3.5 min. MS Source and MS Quad temperature were set at 230°C and 150°C respectively and at Scan mode for m/z from 43-550.

### RESULTS
During analysis different dosage forms such as Tablets, Capsules, Syrups, and Powders of illicit origin manufactured by clandestine laboratories were encountered and analyzed. Various Opium alkaloids such as morphine, codeine, thebaine, papaverine, and noscapine were identified in the suspected samples with respect to their retention times and mass spectra as compared to the certified reference standards.

### CONCLUSIONS
Opium is not only abused as raw Opium but is also abused in the form of different dosage forms such as tablets, capsules, powders, and syrups in Punjab, Pakistan. Proper measures should be taken for quality control testing of Ayurvedic herbal medicines available in Pakistan.