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To the Editors:

## Dextromethorphan abuse

A wide range of drugs is being abused by teenagers across the world, and over the years, they seem to have made the discovery that they could get "high" by taking over-the-counter medicines containing dextromethorphan (DXM). Cases of recreational use of DXM [1] and its side-effects [2] have been reported in other countries. The following case histories are presented to emphasise the main clinical features and the management of dextromethorphan abuse among Sri Lankan youths.

A 19-year old male, who had been abusing Corex-D for the last four years presented with elevated mood, visual hallucinations and a recent risk taking life-style. He also had experienced dissociative states and depersonalisation. A 17-year old schoolboy with an unremarkable past history, presented with undue irritability, social withdrawal and declining school performance over the last 4-5 months. A previously stable 16-year old schoolboy, presented with social withdrawal, irritability, paranoid and grandiose delusions for the last 2 months. He had been taking Corex-D, for 4-5 months. A male in his thirties presented with paranoid delusions and auditory hallucinations of one month's duration. A male in his twenties had become socially withdrawn, paranoid and mute over a period of 45 days. He had been abusing Corex-D, daily for the last 6-8 months.

All 5 patients had been abusing Corex-D in amounts exceeding 120 mg daily. They made a good recovery after stopping the substance, and with adequate doses of antipsychotics. We also used behaviour therapy programmes to change their life-styles in positive ways and included the family in the management. Educational programmes were used to emphasise the dangers of misuse of substances, including Corex-D.

Dextromethorphan (DXM) is an opiate agonist [1,3] and the D-isomer of levorphanol [1,3,4]. Some ingest 250 to 1500 mg in a single dose. The recommended therapeutic dose is 10 to 20 mg every 4 hours or 30 mg every 6 to 8 hours [5]. In doses above 120 mg, the effects of DXM are similar to those of phencyclidine or ketamine [3]. These include visual hallucinations, dissociative anaesthesia and depersonalisation, stupor, distortion of motion or speech, and agitation [3]. Our case histories show most of these symptoms. Chronic ingestion of large doses of DXM can cause psychotic states. A large dose is defined as 5 to 10 times the dose recommended for control of annoying non-productive cough [3]. DXM is abused as a group activity or alone. The misuse of DXM in Sri Lanka may increase, as the drug is legal, relatively easy to obtain, inexpensive, and because of its less stigmatising nature and the low risk perceived by abusers and relatives. Parents should be made aware of the drug's potential for abuse and the possibility that DXM abuse can act as a gateway for abuse of more dangerous drugs.

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## Research letters

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