

Report:

Restrictions on the prescribing of dextropropoxyphene (DXP) – effects on sales and cases of fatal poisoning

SUMMARY

In 2001 the Medical Products Agency implemented restrictions in Sweden on the prescribing of the analgesic agent dextropropoxyphene (DXP). This was done in the light of findings by researchers in forensic medicine showing that 200 individuals per year had died as a result of intoxications in which DXP was assessed to have caused or contributed to the fatal outcome. The restrictions state that drugs containing DXP must be prescribed on a special prescription form.

The principal aim of the present study was to evaluate the effects of the restrictions with regard to sales of DXP products, number of cases with DXP found in the blood at forensic medicine examinations and the number of intoxications where DXP was considered to have caused or contributed to the fatal outcome.

In order to compare the time before and after the restrictions, the study was extended over the years 2000 to 2002. To elucidate further the development after the introduction of restrictions, data from the first quarter of 2003 were collected where possible. In order to explore certain aspects in greater depth, comparisons were also made with data from the 1990s. Data on sales of DXP products in the studied period were obtained from Apoteket AB and the Medical Products Agency. To study the occurrence of DXP in forensic material and the number of intoxications in which DXP was assessed to have caused or contributed to the fatal outcome, data were collected from two national data bases linked to forensic medicine and forensic chemistry in Sweden.

The study showed that sales decreased gradually during the studied period. Compared with the first quarter of 1999 sales in the first quarter of 2003 sales were 66 per cent lower. The decrease in sales had already begun before the restrictions were introduced, which probably can be explained by the great publicity that the forensic study results were given in the media between 1998 and 2001. The decrease continued, however, and between the first quarter of 2001 and the first quarter of 2003 the sales decreased by 50 per cent. The continuous decline was most probably due to the restrictions.

The study also showed that the number of cases with DXP in the blood decreased continuously during the whole time period, as also did the number of DXP intoxications. From the first quarter of 2000 to the first quarter of 2003 the number of cases with DXP in the blood decreased by 57 per cent, from 95 to 41. The number of fatal DXP poisonings decreased from 53 per quarter to 20 during the same period, i.e. 62 per cent. (The total number of fatal poisoning cases in 2000 was 198, in 2001 it was 152 and in 2002 it was 122. The estimated number in 2003, based on forensic statistics of the prevalence of cases with DXP in the blood, was 70).

Just as was the case with sales, the decrease in number of cases with DXP in the blood and in the number of DXP intoxications started already before the

restrictions and then there was an obvious fall during the last quarter of 2001. The number of fatal poisoning cases has been halved since the restrictions were introduced (from 45 to 20).

The reduction of the number of fatal poisonings is favourable, but as long as the drug is still on the market there will be new cases of intoxication. As DXP today is known to be especially dangerous, particularly in combination with alcohol, suicidal individuals will continue to choose this drug in the future. The problem of the impulsive suicidal acts, those that are not intended to be fatal, will remain. The study results also show that the proportion of addicts is high among those who have DXP in their blood when they die. These still constitute a considerable risk group for continued DXP intoxications, both involuntary and those self-inflicted on impulse. Thus, further restrictions in prescribing or total withdrawal of the DXP products would have to be considered to completely solve the problem of fatality due to DXP.

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