To the Editors:

Cost of the paracetamol overdose epidemic

The commonest substances used for self harm in rural Sri Lanka are pesticides followed by oleander seeds [1]. A study done in the National Hospital of Sri Lanka in 2007 reported a different pattern, with medicinal drugs accounting for 68% of admissions due to self poisoning [2]. Paracetamol was the commonest drug used, either by itself (51.8%) or in combination with other substances (4.7%). We believe there is increased use of medicinal drugs in self poisoning in other urban areas of the country as well. Despite the increasing incidence of paracetamol overdose, the costs are not considered high as the case fatality rate is low, unlike in pesticide poisoning [2, 3].

Current management of paracetamol poisoning may not be according to recommended guidelines [3]. As plasma paracetamol levels were not done routinely, this resulted in unnecessary administration of N-acetylcysteine (NAC) and methionine [3].

Table 1. Number of N-acetylcysteine vials issued by year

<table>
<thead>
<tr>
<th>Year</th>
<th>NAC vials</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>10299</td>
</tr>
<tr>
<td>2005</td>
<td>12315</td>
</tr>
<tr>
<td>2006</td>
<td>24001</td>
</tr>
<tr>
<td>2007</td>
<td>36559</td>
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</tbody>
</table>

Source: Medical Supplies Division

Table 1 shows that the number of N-acetylcysteine vials issued by the Medical Supplies Division for the whole country has gone up more than 3 fold over a period of 4 years. At a cost of Rs. 857.45/vial, the total cost of N-acetylcysteine in 2007 was Rs. 31,347,514. Because of the low mortality rates, the surge of paracetamol poisoning has not received the attention that organophosphate poisoning does. No measures have been taken yet to reduce the incidence of this new trend, which is costly to the health services of the country.

Reducing access to lethal poisons has reduced suicide rates previously. In England and Wales, there was an 80% reduction in deaths due to gas poisoning between 1963 and 1971 after replacement of coal gas with natural gas. In Sri Lanka, restrictions on sales of pesticides may have accounted for the reduction in suicide rates since 1995 [4]. In 1988, after legislation in the United Kingdom limited the previously unrestricted sale limit of paracetamol for pharmacies to a maximum of 32 tablets, and for other retail outlets from 24 to 16 tablets, the frequency of severe hepatotoxicity and deaths due to paracetamol overdose reduced. Therefore, health professionals should explore the feasibility of introducing legislation to restrict paracetamol sales, an intervention found effective in other countries.

References


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