Assess the knowledge and problem faced by the spray painters working in small scale auto garages in Sriperumbudhur

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Abstract
Paint products are widely used in industry to provide surface coating for protection against corrosion, for appearance, as electrical insulation, for fire retardation and for other special purposes. Basically paints are a mixture of pigments, solvents and other additives to enhance the performance of paint, like dryers and hardeners.

Objective: The main objective of the study is to assess the knowledge and problems among the 60 spray painters who are working in small scale auto garages at Sriperumbudhur.

Methods: Descriptive study was used to assess the knowledge and problems faced by the spray painters, 60 samples who met the inclusion criteria were selected by convenience sampling technique. Data was collected by using structured interview questionnaire.

Results: Out of 60 samples 23(38.3%) painters had inadequate knowledge, 32(51.6%) painters had moderate level of knowledge, and 5(8.3%) painters had adequate knowledge, and 22 (36.6%) of samples having symptoms of cough, 13 (21.6%) of samples having breathing difficulty, 23(38.3%) of samples having eye problems.

Conclusion: The study finding revealed that it is important to create an awareness among the spray painters, by creating an awareness among spray painters to use protective equipments and helps in improving their health.

Keywords: Spray Painters, Auto Garages and Sriperumbudhur

Introduction
Paint products are widely used in industries. Paints can be applied by a variety of processes including brush, roller, dip, flow, conventional air spray, airless spray, disk spraying and powder coating. The adverse health effects of spray painting are reported in this study. Coatings that spray painters apply can enter their bodies through the nose, mouth, and skin. From there they can enter the respiratory system, the digestive system, and the bloodstream. The rate of solvent uptake through the skin varies among workers due to the variation in skin thickness, skin perfusion, and presence of cuts or abrasions of the skin. Increased solvent absorption can occur when solvents are trapped between wet clothing and skin. In short, organic solvents may be absorbed by workers either through the respiratory tract or the skin.

Need for the study
In India study revealed that 40-59% of workers in different occupational work environments suffered from one or more respiratory ailments. As much as 36-40% of the workers reported work-related symptoms which is close to similar data from western countries. A high incidence of respiratory disorders was recorded in workers of painters and working in paint industry due to the chemical poisoning which is inhaled and exposed. Older workers suffered more than the young ones. In India, the studies revealed that 2010, 40-59% of workers in different occupational work environments suffered from one or more respiratory ailments. As much as 36-40% of the workers reported work related symptoms which is close to similar data from western countries.

Materials and Methods
A descriptive design was used to conducted study to assess the knowledge and problems faced by the spray painters working in small scale auto garages (20 - 60 years) at Sriperumbudhur.
Data was collected after obtaining permission from the institution, and ethical clearance from the ethical committee. The population consisted of spray painters, 60 samples who met the inclusion criteria were selected by convenience sampling technique, the purpose of the study was explained and written informed consent was obtained from the samples. Data was collected by using structured interview questionnaire. Data was collected, optimized and analyzed in terms of descriptive statistics.

Result
Distribution of level of knowledge on health hazards of painters among spray painters working in small scale auto garages
In that out of 60 samples 23(38.3%) had inadequate knowledge, 32(58.3%) had moderate level of knowledge, and 5(8.3%) had adequate knowledge.
And in that out of 60 samples that 22 (36.6%) having symptoms of cough, 13 (21.6%) having breathing difficulty, 23(38.3%) having skin problems, 17(28.3%) having eye problems.

Table 1: Distribution of level of knowledge on health hazards of painters among painters

<table>
<thead>
<tr>
<th>S. No</th>
<th>Level of knowledge</th>
<th>Sample number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inadequate knowledge</td>
<td>23</td>
<td>38.3%</td>
</tr>
<tr>
<td>2.</td>
<td>Moderate knowledge</td>
<td>32</td>
<td>58.3%</td>
</tr>
<tr>
<td>3.</td>
<td>Adequate knowledge</td>
<td>5</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

Table 1 Shows that out of 60 samples 23(38.3%) have inadequate knowledge, 32(58.3%) have moderate level of knowledge, and 5(8.3%) have adequate knowledge.

Table 2: Frequency and percentage distribution of different health problems occurred to the painters

<table>
<thead>
<tr>
<th>S. No</th>
<th>Symptoms</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Cough</td>
<td>22</td>
<td>36.6%</td>
</tr>
<tr>
<td>2.</td>
<td>Breathing difficulty</td>
<td>13</td>
<td>21.6%</td>
</tr>
<tr>
<td>3.</td>
<td>Skin problems</td>
<td>23</td>
<td>38.3%</td>
</tr>
<tr>
<td>4.</td>
<td>Eye problems</td>
<td>17</td>
<td>28.3%</td>
</tr>
</tbody>
</table>

Table 2 Shows that 22 (36.6%) of samples having symptoms of cough, 13 (21.6%) of samples having breathing difficulty, 23(38.3%) of samples having skin problems, 17(28.3%) of samples having eye problems.

Discussion
The main of this study was to assess the knowledge and problems faced by the spray painters who are working in small scale auto garages. The nurse should encourage to create knowledge and awareness regarding occupational health problems and educate the painters to use the personal protective equipments like masking, gloving, safety glasses, which reduce the cause of occupational health diseases among the spray painters. Advanced education in nursing prepares a nurse to take independent discussion and function independently to advocate patient right for health care which is appropriate. The nursing administration can improve knowledge among the staff nurse through development programme like in service education and contining education programme.

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Conflict of interest
The author declare no conflict of interest.

References
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