Prevalence of pica and dietary preferences during pregnancy

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Abstract
An attempt was made to determine the Prevalence of pica and dietary preferences during pregnancy. As such a study was conducted an one Thousand and two pregnant women some from Faridkot district of Punjab. Fifty per cent subjects were from the lower socio-economic group and the rest were from higher socio-economic group. The prevalence of pica was maximum among the subjects belonging to the lower socio-economic group. As many as 50 percent of them had craving for mud, chalk and clay. Prevalence of pica and dietary preferences during pregnancy cultural practices food beliefs and taboo followed by various communities during pregnancy influence to a large extent the nutritional states of pregnant women. This habit was least among higher income group subject. There were a large number of subjects in the lower socio-economic group pregnant women who indicated preferences for savoury and other foods as compared to those of higher socio-economic group. The results indicated the prevalence of pica is common among the women of lower socio-economic group because they were less educated.

Keywords: pica, food taboos, dietary preferences, food beliefs, education, socio-economic group

Introduction
Prevalence of pica and dietary preferences during pregnancy cultural practices food beliefs and taboo followed by various communities during pregnancy influence to a large extent the nutritional states of pregnant women. The prevalence of such ideas affects the outcome of pregnancy. It is postulated that appetite compulsions of pregnant women may have originated from physiological reactions under the stress of pregnancy which would influence the health of pregnant women as well as the foetus. Prevalence of pica is generally associated with anemia. This is common among the less educated pregnant women belonging to low socio-economic groups. The diets of fifty four and thirty two per cent of Negro pregnant women consuming clay and raw maize starch respectively were reported to be low in energy, calcium, iron, thiamine and niacin, as compared to inadequate diets of fourteen per cent of the control subjects (Edwards et al. 1959, 1964) [2, 3]. It was also reported that the blood hemoglobin level, iron and calcium level of pregnant Negro women eating clay and raw corn starch daily were found to be low.

A group of 300 Japanese pregnant women were surveyed by Suginria et al. (1983) who reported that 45.3 per cent of the subjects had altered dietary preferences during pregnancy. Practically all of them preferred sour or richer dishes, and snacks or small meals. Frische et al. (1984) observed that of the 168 Danish pregnant women 10 per cent had unsatisfactory diets due to altered dietary preferences.

Khanum and Umphy (1976) [9] observed that 18 per cent of the population had pica. Of these 51 per cent belonged to low socio-economic group. The Prevalence decreased with the raise in income and education level. Geophagia was found to be the most common form of pica, ash, lime, raw rice and charcoal were also eaten by a few of mothers. None of the mother with educational level above matric had the habit of pica.

Devadas et al (1978) [1] also studied the dietary preferences and the belief prevalent in a group of 650 mothers from low and middle socio-economic groups. They observed that food belief of both the well fed and poorly fed groups were more or less the same.
Methodology
The present study the Prevalence of pica and food preference of pregnant women of urban areas of Faridkot district of Punjab belonging to lower and higher socio-economic group was carried out. One thousand and two pregnant women who were in their last trimester of pregnancy were divided into lower and higher socio-economic group in such a manner that at least fifty percent of those belonged to the lower socio-economic group and the rest were from higher socio-economic group. A one day survey by the questionnaire schedule adopting 24 hour recall method was conducted. On the basis of diets consumed, the weight of raw foods & the nutrient intake of the subjects, Prevalence of pica and food preference were determined.

Result

Table 1: Prevalence of Pica and Dietary preferences among the subjects

<table>
<thead>
<tr>
<th>Pica/food preference</th>
<th>Low socio-economic group</th>
<th>High socio-economic group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mud</td>
<td>171</td>
<td>62</td>
</tr>
<tr>
<td>Chalk</td>
<td>49</td>
<td>28</td>
</tr>
<tr>
<td>Clay</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>None</td>
<td>250</td>
<td>370</td>
</tr>
</tbody>
</table>

Table 1 and fig1 show the classification of subjects according to the prevalence of pica and dietary preferences. The prevalence of pica was maximum among the subjects belonging to the lower socio-economic group. As many as 50 percent of them had craving for mud, chalk or clay. This habit was least among higher income group subjects. About 26 percent of them had a craving for mud, chalk, clay etc. Over all, 74 per cent of the higher socio-economic group pregnant women had no craving for pica as compared to 50 percent of the subjects in the low socio-economic group. The maximum number of subjects in various groups had craving for mud a high whose educational level was below matric. None of the mothers with educational level above matric had the habit of pica.

Illiteracy to the extent of 18 per cent was recorded among the lower socio-economic group where as the illiteracy in the higher socio-economic group was only 4.2% only. 7.4 per cent of those belonging to the higher socio-economic group were post graduate. The study indicated that mother having three daughters were keen to have the fourth child in the hope to be getting a son in less educated women. It was also observed that the prevalence of pica and food fads were common in the low socio-economic group because they were less educated. Hira et al, (1986) observed the nutrient intake significantly increased with improvement in education and socio-economic status of pregnant women. Result showed that the respondents that are 56 per cent did not believe in hot and cold food. Nutritious foods such as papaya, egg, mango, pineapple horse grain were considered hot foods & abortive and these foods were avoided monthly in less educated group. Milk was considered as a special food and was believed to improve the body’s complexion when taking during pregnancy.

Family income per month those families who per capita monthly income was upto Rs. 1000/- were considered as lower socio-economic & those families whose per capita monthly income was Rs. 3000 & above were considered as higher socio-economic group.

Among the expectant mother of lower socio-economic group of the city of Mysore (Karnataka). The habit of eating mud and clay was most common (khanum and Umphaty, 1976). There was a large number of subject in low socio-economic group pregnant women who indicated preference for savory and other foods as compared to those of the higher socio-economic group food preference have been reported to be quite common by Belawady(1969) Devadas et al. (1978) reported prevalence of food preference and belief among the well fed as well as poorly fed, pregnant women in Hyderabad.

Table 2: Educational level of the subjects

<table>
<thead>
<tr>
<th>Education</th>
<th>Low socio economic group</th>
<th>High socio economic group</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>90</td>
<td>21</td>
<td>31.8</td>
</tr>
<tr>
<td>Below Matric</td>
<td>219</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>Matric</td>
<td>141</td>
<td>170</td>
<td>31</td>
</tr>
<tr>
<td>Up to Graduation</td>
<td>30</td>
<td>173</td>
<td>22.3</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>--</td>
<td>37</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Conclusion
There for a strong need is felt to impart nutrition education to bring change in their attitudes toward food believe and emphasizing the importance of nutrition during this critical period for their own health and well being of their foetus.

Reference
5. Alcohol and tobacco. Ugeskrift loeger 146, 2497