Assessment of morbidity pattern of oral diseases following substance use in young adult & adolescent in Kathmandu.

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Abstract

Oral disease is commonly associated with considerable pain anxiety and social functioning impairment. The cross sectional study was carried out among 106 respondents of age group 10-19+ yrs with an objective of study the problems and risk factors leading to oral lesions in these tobacco and non tobacco substance users. Control of substance abuse is one of main interventions in essential health services (EHCS). The overall prevalence is in this hospital based study among the total respondents 90 used other forms of smoked tobacco like bidi/cigarettes. This study has been also considered in quantitative a qualitative analysis to find out better approach to prevent them from going to substance abuse in earlier age group. Ten cases have been dropped as they could not come for follow up due to their searching of job for their survival. Sixteen subjects were randomly subjected for self help group discussion and other twenty excluded from study. The urban subjects were 58 (64.4%) and 32 (35.6%) from rural area. The unemployed youth were 67 (74.5%) involving more in substance use. The common oral lesion was in male as Leukoplabia in 23 (47.9%) and in female 14 (33.3%) respectively.

Keywords: Adolescent, young adult, substance abuse.

Introduction

Poor oral health (O.H) is significantly leading to major chronic disease as eventually complications. Later on poor oral health also cause disability. Oral lesions also share common risk factors as beetle nut & pan use, zarda and tobacco smoking etc. General health problems also worsen O.H. conditions. The purpose of this study was to assess oral health related problems assessment of dental caries status was also studied. Control of substance abuse including alcohol & tobacco as one of main interventions in essential health care services E.H.C.S[1]. Tobacco use among adolescents aged 13-15 years is 11% in female and 19% in male.

Materials & Methods

This was a cross sectional study conducted among 106 adults including productive age group (young adult)
attending dental opd in department of oral medicine and radiology. A total of 116 participants were included who participated voluntarily for this study. This includes both quantitative & qualitative participants as 106 respectively. Ten dropped out from study as they were busy in searching the job. The study was carried out in these 116 participants from July 2013 to Sep 2013. Age was recorded in completed years at last birth day. This was taken as confirmation from ‘’ Aadhar card ‘’ or school I.D. card. This study was conducted to find out oral lesions in dental out patients, dept of oral medicine & radiology, The other objective was to find out various oral lesions and its prevalence in hospital based study and to find out common risk factors leading to various oral diseases.

Inclusion criteria:
Patients of 10 years -25 years selected for study purpose (both sexes inclusive).

Exclusion Criteria:
1. The patients less than 10 years & above 25 years were excluded from study.
2. Any person who is uncooperative was eliminated from study.

Informed consent was obtained from participant. Confidentiality was maintained strictly. Permission was obtained from the ethical committee for this study from the college. Oral examination was done by dental surgeon thoroughly in outpatient clinic and randomly selected 16 respondents were subjected for self help group intervention thrice at interval of 1 week. Results in S.H.G. intervention revealed more acceptance of awareness and more open for discussion while it is not encouraging in other quantitative intervention. Independant variables like Age, sex, religion & literacy level were noted. Dependant variables tobacco consumption in smoking and non smoking form was asked. Clinical oral check up was done by using torch and mouth mirror. Instrument: Closed angle questionnaire pretested Proforma was used. Socio Demographic Data of the patients, gender, residential status, employment status, education. Currently using substances like pan with betelnut and tobacco , gutaka, smoking was asked. Distribution of Oral Lesions was studied. Responsible risk factor like Emotional & Social bonding , Peer pressure , Stress was enquired from subjects.

General Objective:
To find out oral lesions in dental out patients, dept of oral medicine & radiology.

Specific objectives:
1. To find out various oral lesions and its prevalence in hospital based study.
2. To find out common risk factors leading to various oral diseases.

To find out anemia ,the Hb% was done in laboratory as one of routine investigation.

Data thus collected, compiled & analyzed by using SPSS 17 & accordingly simple test were applied for analytical purpose.

Results
Table 1: Socio Demographic Data of the patients

<table>
<thead>
<tr>
<th>Gender</th>
<th>Residential status</th>
<th>Employment</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Urban</td>
<td>Employed</td>
<td>SSC</td>
</tr>
<tr>
<td>48(53.30%)</td>
<td>58(64.40%)</td>
<td>23(25.50%)</td>
<td>49(54.40%)</td>
</tr>
<tr>
<td>Female</td>
<td>Rural</td>
<td>Unemployed</td>
<td>Above SSC</td>
</tr>
<tr>
<td>42(46.70%)</td>
<td>32(35.60%)</td>
<td>67(74.50)</td>
<td>41(45.60%)</td>
</tr>
</tbody>
</table>

Table 1 shows the gender wise distribution in 90 cases 48 (53%) were males & 42(46.7%) females. The literacy level was higher in males as in 58(64.4%) and that of female was 32 (35.6%) percent. Out of which 49(54.4%) were below ssc and 41(45.6%) were above SSC.
regards status of employment, the unemployment was 67(74.5%) and rest 23 (25.5%) were employed as non skilled labourer. Urban patients were 58(64.4%) & from rural area 32(35.6%) patients contributed in this study.

Table 2: Currently using substances

<table>
<thead>
<tr>
<th>Substances</th>
<th>Number of Subjects</th>
<th>Percentage of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gutaka</td>
<td>64</td>
<td>71.10%</td>
</tr>
<tr>
<td>Smoking</td>
<td>26</td>
<td>28.90%</td>
</tr>
<tr>
<td>Pan(with tobacco &amp; beetlenut)</td>
<td>56</td>
<td>62.20%</td>
</tr>
</tbody>
</table>

Table 2 shows Gutaka was the most common substance used by 64(71.1%), pan with beetle nut & tobacco 62(62.2%) and smoking was only observed in 34(37.8%) cases. As regards age wise distribution tobacco consumption was observed in 62(62.2%) under age of 20 years and smoking was observed (37.8%). Participants rest 34(37.8%) where using other substances like pan gutaka & smoking.

Table 3: Distribution of Oral Lesions

<table>
<thead>
<tr>
<th>Lesions</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Homogenous leukoplakia</td>
<td>23(47.9%)</td>
<td>14(33.3%)</td>
</tr>
<tr>
<td>2. OSMF</td>
<td>10(20.8%)</td>
<td>07(16.6%)</td>
</tr>
<tr>
<td>3. Speckled leukoplakia</td>
<td>04(8.3%)</td>
<td>02(4.7%)</td>
</tr>
<tr>
<td>4. Smokers meloanosis</td>
<td>09(18.7%)</td>
<td>01(2.3%)</td>
</tr>
<tr>
<td>5. Reticular lichen planus</td>
<td>Nil</td>
<td>02(4.75)</td>
</tr>
</tbody>
</table>

Table 3 shows distribution of oral lesions. The physical examination of oral cavity shows that leukoplakia was in 23(47.9%) and 14 (33.3%) in females. Oral sub mucous fibrosis (osmf) was observed in 10(20.8%) males & 7(16.6%) in females. The smokers’ meloansis was in 9(18.7%) in males and only 1(2.3%) in female. However, reticular lichen planus & speckled leukoplakia was 2(4.7%) in female.

Table 4: Responsible risk factor

<table>
<thead>
<tr>
<th>Risk factors</th>
<th>Pre I.E.C N= 106</th>
<th>Post I.E.C N=98</th>
<th>Z test</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Emotional &amp; Social bonding</td>
<td>44</td>
<td>12</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>2. Peer pressure</td>
<td>96</td>
<td>36</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>3. Stress</td>
<td>94</td>
<td>84</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td>4. Easy &amp; cheap</td>
<td>16</td>
<td>06</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>5. Immature Personality</td>
<td>18</td>
<td>06</td>
<td>0.012</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 depicts associated risk factors as emotional & social bonding in pre information education & communication (I.E.C) 44(13.2%) and 12 (12.2%) in post I.E.C (p= 0.84) which is non significant. Similarly peer pressure is 36(33.9%) of pre I.E.C group subjects and 36 (37%) in post I.E.C subjects. Although stress was in 94(88.6%) in pre I.E.C & 84 (86%) in post I.E.C with p value 0.52 as non significant. Only easy & cheap available gutaka is most common in 16(15.0%) pre I.E.C a in post I.E.C, 06(6.5%) which is significant. Similarly immature personality leads to use of substance as an important risk factors per I.E.C in 18(16.9%) & 6 (6.1%) in post I.E.C which is significant as observed p value as 0.02 & 0.012 in former and later group.

Discussion

The use of focus group interventions to asses design of message strategies & to conduct needs assessment [2].
The focus group interviews were found to be a valid tool for elucidating sensitive aspects of the substance uses and its relative importance of such issues to each & every individual. The subjects reveal that how sensitive they are, when the subjects are under pressure like such of employment, time constrains & financial constrain To overcome such societal pressures to start these habits like tobacco chewing, smoking & use of pan (beetle nut & \ or beetle leaves.)

The following areas were explored.

a. Reason for use of tobacco/ beetle nut with tobacco / beetle nut with pan.

b. Risk factors & circumstances.

c. Ways to decrease such habits.

Q1. What do you think about reasons for use o tobacco etc. amongst such younger age groups?

The most common response was cited “to relieve stress”. It was followed by some patients that it is socially acceptable in society.

It also reduces anxiety due to work overload throughout working hours in day time .some patients has cited the relax feeling following tobacco chewing. Almost both the sexes contributed by saying that it is incomplete feeling without the use of this substance.

Q2. What do you think actual reason to consume tobacco?

Some female participants added that they are afraid of getting other addiction such as alcohol. As compare to that is less harmful.

Q3. What do you think various risk factors and circumstances lead to consumption of tobacco pan & zarda.

The most common answer was to get relief from family tension & pressure and from work load .If involved in employment. Another important point is easy availability & it’s cheap of i.e. 1. Gutaka pack in Rs one only while tea cost Rs 5 to 10.

Some females have described “ignorance” is important risk factors among this age group of ours.

Two boys narrated that this is one way of life style modification without realizing eventualities of complications. It is also part of immature personality.

No responsibility or sense of care free person existed as suggested by two young boys.

Q4. What are the ways to decrease such substance use/ abuse.

Job opportunities for skilled & non skilled person like us and also during evening time classes for education to prevent from such habits & eventual complications. The questionnaire was completed & in literate subjects voluntarily by themselves under my guidance .studies has shown alarming increases of problem on worldwide basis, globally even in subjects pursuing professional carriers [3] with all questionnaire survey it is more difficult to assess reliability & accuracy of data especially in small sample size like in this study.

This study attempts to know the pattern of oral lesions in relation to substance abuse amongst young adult .This being productive age group for financial support to family. The self reported in this study for tobacco consumption is 32% in preadolescent age group.khanel et .al conducted the study in Nepal tobacco consumption is 27.6% along with other products. In this study tobacco use in form of gutka & pan is in higher range. One among many implications of tobacco use would be its facilitating property as compare to used of other stronger hard substance which is commonly known as “gateway drugs” [4]. In focus groups interview majority of subjects were denied of taking alcohol as they afraid of police trouble in such new places of work .Hence they started this habit of tobacco consumption [5]
Conclusion
This study has revealed immature personality one of the important characteristics going for tobacco addiction. Other factor was unemployment or low salary & financial compel the person to use tobacco/gutaka. The key strength of study was its unique approach (mixed method) i.e qualitative & quantitative approach. Therefore in self group intervention, the subjects were more open for discussion & seek advice /suggestion. According to recent studies increase of work related stress leads to increase in unhealthy coping habits[6,7,8]. Therefore implementations of effective interventions .Such as I.E.C & S.H.G should be considered in need of local population. The better choice is to be implemented accordingly. This can deliver good service to our younger & adult population. Through group counseling following could be detected early and control can be achieved through of stress also at community and school/college level.
1. Promoting self awareness
2. Creating conducive environment
3. Assisting & identify struggling person
4. Stress management in such habit creative environment.
6. Advise to get treatment for depression also simultaneously.

References
1. Poudel SG D prevalence of smoking and perceived health problems among male population of Dharan Nepal J KMC 2013