

ABSTRACT

Background:

Risk behaviours related to Oral Potentially Malignant Disorders (OPMD), like usage of tobacco and alcohol has been shown to be on the rise among youth globally. Oral cancers are more costly to treat, cost effective preventive strategies should be introduced specially to developing countries. Tobacco and alcohol behaviours are related with oral potentially malignant disorders, and effectiveness of preventive strategies among youth groups residing in urban slum areas have not been studied in Sri Lanka.

Objective:

To assess the prevalence of oral potentially malignant disorders, level of risk behaviours, reasons for risk behaviours and to determine the effectiveness of an oral health promotion intervention to change the selected risk behaviours related to oral potentially malignant disorders among youth (15-24 years old) in the Colombo district urban slum areas.

Methods:

The present study utilized three components to achieve the objective. The first component was a descriptive cross sectional study to find out the prevalence of OPMD and selected risk behaviours related to OPMD. The second component was a qualitative study to explore the views for initiation, quitting and continuation of selected risk behaviours related to OPMD. The third component was a quasi-experimental study to find out the changes in the improvements in knowledge, changes in the attitudes and selected behaviours related to OPMD among 15 to 24 year old age youth residing in urban slums in the Colombo district after implementing an oral health promotion intervention which was developed based on the findings of the component two.

Sample size for the component one was 1435 and the study setting was Colombo and Thimbrigasyaya divisional secretariat areas in Colombo District. Sampling technique was cluster sampling technique with probability proportionate to size technique. Study participants were youth aged between 15 years to 24 years. Pre tested interviewer administered questionnaire was used for the data collection in component one. Statistical analysis was done with SPSS version 21 using descriptive statistics. Second component composed of two focus group discussions and thirteen in depth interviews. Pre tested focus group discussion guide and an in depth interview guide was used to conduct the discussions. Purposive sampling technique was used. Data was summarized immediately after the discussions and analysis was done manually using themes. Third component composed of three phases. Phase one was the pre intervention phase and the sample was a sub sample from the main cross sectional study. Therefore already collected data in the component one was utilized for the analysis of the pre intervention phase. Both intervention group and the control group comprised of 120 participants who can comprehend a skill base oral health promotional intervention in Sinhala medium.

Intervention was developed after doing several analysis of the gathered information in focus group discussions and in depth interviews. Development and implementation of the intervention was done in several steps as Risk behaviour analysis, Target audience analysis, Identify the community groups to mobilize (Community mobilization), Message development, Media and channels analysis, Development of the intervention, Implementation of the intervention, Monitoring, Evaluation and Sustainability ensures. The intervention package “Youth for Better Tomorrow” composed of five components named advocacy, self- awareness campaign, Introduction of relevant Information, Education and Communication materials (IEC), community mobilization and social marketing.

Advocacy groups were religious leaders and community leaders and youth societies were the main community mobilizing group and other societies as samurdhi society, women’s society and death society also played a role in community mobilization component. For the social marketing, videos available in National Cancer Control Programme were utilized. Regular monitoring was done using check lists, participatory observation visits, telephone conversations and monthly meetings. Post intervention

assessment was done using the same interviewer administered questionnaire after six months.

Results:

Mean knowledge score about the OPMD related risk factors and clinical features were 3.37 (95% CI 3.26-3.46), and nearly 72% participants had unsatisfactory knowledge. Mean attitude score was 3.53 (95% CI 3.48-3.57) and 98% had unsatisfactory level for attitudes. OPMD cases were not found among the present study sample.

Overall prevalence of current tobacco behaviour was 50.4 % (95% CI- 48.1%-53.3%). Prevalence of current smoking behaviour , betel chewing behaviour and tobacco and areca nut packet chewing behaviour was 20% (95% CI 18.6%-22.2%), 21.5% (95% CI 19.5%-23.8%) and 33% (95% CI 30.5%-35.3%) respectively. Among them 48.8% (95% CI 43%-54%), 47.9% (95% CI 42.3%-53.4%), 40.3% (95% CI 36%-44.8%) respectively use relevant products daily. Prevalence of current alcohol drinking behaviour was 21% (95% CI 18.8%-23%) and 34.4% (95% CI 29.2%-40%) current users were daily users.

The mean age of initiation of risk behaviours was 15.44 years (95% CI 15.29-15.28). Around 51 % (95% CI 48.1%-54.2%) of participants expressed friends as the reason for initiation of risk behaviours followed by family influence. Around 86% (95% CI 84%-88.2%) of the participants practice these behaviours inside the home. Even though 11% (95% CI 9.9%-13.9%) of participants had quit attempts only 2.5% (95% CI 0.8%-7.7%) had success in quitting. As well as 19.3% (95% CI 17%-21.8%) had an intention to quit.

Major factors that are causing initiation, continuation and quitting of risk behaviours was identified as Perceived feelings, Peer pressure ,Knowledge, Attitudes ,Skills of both the youth and their parents ,School Education, Free time, Value to youth, Family network, Social networks, Own intention Cultural beliefs, Role models, Knowledge on helping places to quit and availability and accessibility of the products.

In the post intervention assessment a statistically significant difference was found between mean knowledge scores and attitude scores of intervention group and control group. (Independent sample Mann Whitney U test, $P < 0.05$). Statistical significant difference was obtained among quit rate (QR) of tobacco behaviour (QR=0.3, $P < 0.005$), smoking behaviour (QR=0.12, $P < 0.05$), betel chewing behaviour (QR=0.71, $P < 0.005$), tobacco and arecanut packet chewing behaviour (QR=0.12, $P < 0.005$) and alcohol behaviour (QR=0.2, $P < 0.005$) in the intervention group compared to control group. Intervention group showed a significantly low Fresh uptake rate for all behaviours compared to control group. ($p < 0.05$)

Awareness of self-mouth examination and practicing self-mouth examination was significantly increased in the intervention group ($p < 0.05$). Quit attempts and intention to quit has also increased significantly in the intervention group. ($P < 0.05$)

Conclusion and recommendation:

Prevalence of tobacco and alcohol usage among youth aged between 15 years to 24 years who were residing in urban slum areas in the district of Colombo was high and multi component oral health promotional intervention composed of advocacy, self-awareness, IEC introduction, community mobilization and social marketing with continuous regular monitoring was effective in improving the knowledge, changing the attitudes and changing the tobacco and alcohol behaviours.

The youth residing in urban slums should be identified as a high risk group and urban slum areas should be identified as priority setting in health promotion setting development programmes. Well planned oral health promotion activities combined with bi annual screening programmes for identification of oral potentially malignant disorders should be conducted regularly with continuous monitoring.

Key words: Youth, Urban slums, oral potentially malignant disorders, multi component oral health promotion intervention