

ABSTRACT

Unhealthy behaviors lead to the causation of many diseases including Non Communicable Diseases (NCDs). Common behavioral risk factors that lead to NCDs include unhealthy dietary practices, inadequate exercises, smoking and excessive consumption of alcohol. NCDs and their behavioral risk factors are commoner among males (Kasturiratne, et al., 2005). Unhealthy behaviors among men affect the individual, family and the society in a negative way. In the absence of a national program to determine the prevalence of unhealthy behaviors and associated factors among economically active men the depth of the issue remains unknown.

The objective of the survey is to identify and describe common unhealthy behaviors, related anger of selected unhealthy behaviors and certain associated/ riskfactors for such unhealthy behaviors among economically active men in the district of Kalutara.

The study consists of three components. In component I, In Depth Interviews (IDI) were carried out among Conflict Resolution Committee officers, Administrative Officers at village level appointed by the divisional secretariat and Public Health Midwives in the district of Kalutara with a view to identify unhealthy behaviors, related anger of selected unhealthy behaviors and associated socio –demographic factors among economically active men in the district. Following IDIs an interviewer administered questionnaire was formulated. In component II, IAQ was administered to 5402 men in the age group of 35 -50 years who are permanently living in a medical Officer of Health (MOH) area (Ingiriya) in the district of Kalutara. Socio – behavioral mapping of 5402 men was carried out simultaneously using GIS equipment. In component III, a community survey was conducted in the district of Kalutara using a sample of 646 men in 15 clusters (12 rural areas, 2 urban areas and one estate area) with 43 -44 men in each cluster. Above sample was collected using multistage cluster sampling technique. IAQ was administered to 646 men in an economically active age group.

Following IDIs, transcripts were analyzed carefully to identify common unhealthy behaviors, related anger of selected unhealthy behaviors and associated / risk factors for such unhealthy behaviors. Thereafter socio – behavioral mapping survey of unhealthy behaviors, was carried out and data collected using IAQ were analyzed using SPSS software and GIS data were analyzed using ARC GIS software. Geographical locations and clustering of unhealthy behaviors and certain possible associated factors were visualized using geographical maps. Further analysis in geographical areas where the density of unhealthy behaviors are higher were carried out using data collected through the IAQ. Kernel mapping technique in ARC GIS software was used to visualize areas where clustering of unhealthy behaviors were seen in Ingiriya Medical Officer of Health area. Following the community survey, unhealthy behaviors, related angry mental states of a few unhealthy behaviors and certain associated factors were analyzed and described using statistical tests such as Chi Square test and binary logistic regression.

Following IDIs it was revealed that alcohol consumption, smoking, illegal drug abuse, unhealthy dietary habits, violent behavior in an angry mental state (towards family members, those at work place and neighbors) and deliberate self-harm are the common unhealthy behaviors among economically active men in the district of Kalutara. It was revealed following socio behavioral mapping survey that current alcohol consumers have clustered in Handapangoda, Eduragala, Nimalagama, Rathmalgoda, Imagira and few other Grama Niladari (GN) areas. Current smokers have clustered in Rathmalgoda, Wagawatta, Nimalagama, Eduragala, Ingiriya North and Kurana GN areas. Illegal drug addicts were highest in Maputugala and Rathmalgoda West GN areas. All food types studied were found to be clustering in Ingiriya GN area. Clustering of Roti food consumption at unhealthy levels was seen in Raigamwatta GN area in which estate Tamils live. Deliberate self-harm is clustering in GN divisions Maputugala, Arakawila and Rathmalgoda areas. Angry behavior towards

family members was found to be clustering in Handapangoda, Ingiriya, Rathmalgoda and Batugampola GN areas. Handangoda area has clusters of both 'angry behavior towards people at work place' and 'angry behavior due to land disputes'. Angry behavior at work place is also clustering in Poruwadanda east GN division where 28 factories could be seen.

Results of the community survey in Kalutara showed that the overall current alcohol consumption among men between 35 -50 years who live in the district of Kalutara to be 46.9 %. Significant associations could be observed at $p < 0.05$ for sector (highest in estate sector), ethnicity (highest among Tamils), religion (highest among Hindus), level of education (highest among those educated up to grade 5), monthly income, (highest among those with a monthly income of less than 10,000 rupees) and employment (highest among unskilled laborers) with current alcohol consumption. The prevalence of current smokers among men between 35 -50 years who live in the district of Kalutara was observed to be 33.9 %. Current smoking behavior is significantly associated at $p < 0.05$ with sector (highest in estate sector), ethnicity (highest among Tamils), religion (highest among Christians), profession (highest among unskilled laborers) and nature of employment (higher among those employed permanently) with current smoking. Highest prevalence of illegal drug abuse was found among those living in rural areas. Both the community survey and the social mapping survey showed the prevalence of illegal drug abuse to be 2.3%. The community survey revealed that 84.4 % of the men are currently consuming either one or more foods at unhealthy levels. Among those live in urban areas about 3/5 of the men consume processed meat at unhealthy levels.

Community survey showed that forty four percent of the men have admitted that they had angry behavior towards family members during last one week. Among those from urban areas 3/4 have developed anger towards people at work place. There is a significant association between sector and self-reported anger towards people at work place with men in

urban sector having the highest prevalence of anger towards people at work place. Also it was revealed that one out of eight male who are in the age group of 35 -50 years have reported anger due to land disputes. The percentage of men who have attempted deliberate self-harm during last one year has been 4.2% with the relatively highest percentage of men who have attempted deliberate self-harm being reported from rural areas (4.9%). The highest percentage of men who attempted deliberate self-harm during last one year belonged to those with a diploma or a degree. Commonest method used by those attempted deliberate self-harm has been ingestion of pesticides.

Following the socio –behavioral mapping survey, it could be concluded that unhealthy behaviors are clustering in certain geographical areas which cannot be attributed to higher population densities in such areas. Men who live in Ingiriya GN area could be deemed as most vulnerable to unhealthy dietary habits among men. Roti consumption at unhealthy levels was found to be highest in estate areas where the majority population is Tamil. Poruwadanda GN division was found to be an area where there are many factories and that the men who live there have been most vulnerable to angry behavior towards co –workers. It was also seen that about 75% of men who live in urban areas had angry behavior towards co-workers.

It could be concluded following the community survey, that the prevalence of unhealthy behaviors such as alcohol consumption and smoking is highest among estate Tamils without proper education. Alcohol consumption was common among poor whereas the highest prevalence of smoking could be seen among those men receiving a monthly income of more than 50,000 rupees. The prevalence of illegal drug abuse was highest among those living in rural areas which indicate that this unhealthy behavior has spread to rural areas in Kalutara district. Unhealthy food habits such as processed meat consumption at unhealthy levels has been highest among those in urban areas. It was also found that more than 80% of men

consume either one or more food types that were analyzed at unhealthy levels. Deliberate self-harm has been commoner among men who live in rural areas and the commonest mode used by those who attempted deliberate self-harm has been ingestion of pesticides. It can also be concluded that education has not affected positively towards reducing this unhealthy behavior.

Following the survey, it could be concluded that those men who have a relatively lower income, who have not had proper education and who consume alcohol are more vulnerable to angry behavior at home. It was also revealed that those who are angry at home are more prone to angry behavior at work place. It was seen that estate Tamils are more vulnerable to angry behaviors due to land disputes.

It is recommended that further studies be carried out to analyze why certain unhealthy behaviors have clustered in certain geographical locations and take remedial action with a view to promote healthy behaviors among economically active men. It is also recommended that factors that are significantly associated with unhealthy behaviors be given priority in implementing preventive measures and conduct a similar study in future to see that the prevalence of unhealthy behaviors have reduced.