

Abstract

Introduction- Non-communicable diseases (NCDs) are responsible for half of the global morbidity and 71% of total deaths. Majority of NCD deaths are due to main four NCDs, Cardiovascular diseases, Diabetes, Cancer and Chronic respiratory diseases. Four major NCD shares four common behavioral risk factors known as unhealthy diet, physical inactivity, tobacco and alcohol consumption. Premature NCD deaths is a major concern which kills 15 million of people between 30 and 69 years annually. NCDs disproportionately affects low- and middle-income countries.

Objective- To describe health seeking behaviors, behavioral risk factors and work environment factors contributing to chronic non communicable diseases among non executive workers working in large and medium-scale apparel industries in Dodangoda Divisional Secretariat Division

Methods- A descriptive cross-sectional study conducted among non-executive workers working in four apparel workplaces in Dodangoda Divisional Secretariat Division from August 2018 to September 2018. A total of 427 participants were selected by simple random sampling according to the probability proportionate of non-executive workers in each workplace. Behavioral risk factors and health seeking behaviors among apparel workers were identified using an interviewer administered questionnaire. Short version of the telephone administered international physical activity questionnaire was used to assess the physical activity. The questionnaire and a checklist were used to assess NCD related factors in the work environment. Association of sociodemographic factors with behavioral risk factors and health seeking behaviors were evaluated.

Results-The response rate was 99.5% (n=425). Majority of the respondents were females (91.5%) and the mean age was 31.97 years. Majority were ever married (66.4%) and had educated up to O/L (89.9%). Skipping breakfast, eating bread or short eats for breakfast and taking outside meals were common among apparel workers. Skipping breakfast was significantly higher among never married ($p<0.001$), females ($p=0.004$) who were less than 30 years ($p<0.001$) of age. Eating bread or short eats more than 3 days a week was significantly higher among never married participants ($p=0.014$). Taking out side breakfast

more than three days a week was significantly higher in ever married respondents ($p < 0.001$). The mean fruit consumption was 0.58 servings per day and only 12% had consumed two or more servings of fruits per day. The mean fruit consumption was not associated with any sociodemographic factor. The mean vegetable consumption was 3.73 servings per day and 82.8% of the study group had consumed three or more servings of vegetables per day. Being less than 30 years age (0.001) and never married (0.009) were significantly associated with mean vegetable consumption. However, the mean fruit and/ vegetable consumption was 4.32 servings per day and only 30.4% of the respondents had taken five or more servings per day. A proportion of 62.8% had added salt to rice always or often when cooking rice. The proportion of smokers was 27.8% in males and smoking was significantly associated with being male ($p < 0.001$). A proportion of 38.9% of males were current alcohol users and alcohol consumption was significantly associated with being male ($p < 0.001$). Only, 18.4% of the study group had sufficient physical activity and being male was significantly associated with sufficient physical activity ($p = 0.001$). More than half of the study group had checked their blood sugar (52.7%) and blood pressure (55.8%). The proportion of respondents those who had undergone breast examination was 38.8% and those who had undergone PAP test was 32.2% in females above 35 years of age. Being 30 years or more ($p < 0.001$) and being ever married ($p < 0.001$) had significantly associated with NCD screening and well women clinic attendance. Majority of the study group had preferred government service for blood sugar and blood pressure checking.

NCD screening services was organized at three workplaces during last 5-year period. Three places had conducted diet sessions and two places had organized physical activity sessions during last two-year period. Health education messages were not displayed in any place. Fruits and healthy diet were limited in all the workplace canteens. A proportion of 46% of the study group had worn face mask during worktime and only half of the respondents had reported that their workplace managers had encouraged them to wear personal protective equipment during work.

Conclusions and recommendations- Apparel workers were having unhealthy dietary behaviors and mean fruit consumption was well below the WHO recommended level. Higher proportion of the participants were having low physical activity. Smoking and alcohol prevalence were high among males. Healthy foods were not available for breakfast in

workplace canteens. Interventions related to physical activity like physical activity time period was not available at any workplace.

Health education programs on diet, physical activity, smoking and alcohol consumption are recommended. Healthy canteen policy and time period for physical activity at workplace level are important. Displaying health education messages related to main behavioral risk factors are recommended. Workplace managers should encourage employees to wear personal protective equipment during worktime. More researches on interventions on diet and physical activity should be encouraged at workplaces.

Key words- Non-communicable diseases, behavioral risk factors, health seeking behavior, work environment, apparel industry.