# Prevalence of Non Communicable Disease in Nepal Hospital Based Study

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**Background**

Non-Communicable diseases (NCDs) are in epidemic proportion worldwide. Particularly four diseases-Cardiovascular diseases, Chronic Obstructive Pulmonary Diseases (COPD), cancer and diabetes have greatest share in the morbidity and mortality accounting for around 60% of all deaths worldwide. Disease pattern is also changing from infectious to chronic in Nepal like other developing countries due to epidemiological transition. Burden of infectious diseases is still high; on the top of that it is also facing the problem of non-communicable diseases creating new challenges for our public health system. Data is necessary to formulate policy for tracking the changing disease pattern of the nation. As a result Nepal Health Research Council conducted this study to determine hospital based prevalence of non-communicable diseases. to assess its associated risk factors and to take general information from selected health institutions regarding availability of human resources, infrastructures, diagnostic and treatment facilities for managing non-communicable diseases.

**Methods**

A cross-sectional study was performed wherein 400 indoor patients of fiscal year 2065/66 were randomly selected from each of the 31 selected health institutions. The health institutions included all the regional and sub regional hospitals, zonal hospitals, specialized hospitals of cancer and heart diseases and medical colleges in peripheral level. One central hospital, one medical college and one private hospital of Kathmandu valley were also selected randomly. Data was entered in MS-Excel and further analyzed in Statistical Package for Social Sciences (version 11.5).

**Results**

Data showed that out of total admitted patients, 36.5% patients suffered from non-communicable diseases. Out of total non-communicable diseases, 38% were having heart disease followed by chronic obstructive pulmonary disease (33%) whereas diabetes and cancer accounted for 19% and 10% cases respectively. Out of the total heart diseases, nearly half of the patients suffered from hypertension. It was found that most of the health institutions had limited and untrained human resources and inadequate infrastructure for delivering the health services to manage non-communicable diseases. It showed that the attribution of smoking in development of non-communicable diseases was 60%. The odds of developing non-communicable diseases among physically inactive group (vigorous and moderate) were 4.39 and 3.5 times more than those who were physically active. Multiple regression analysis showed that alcohol and physical activities are independent risk factors for developing the non-communicable diseases.

**Conclusions**

Risk factors reduction activities should be implemented immediately for the reduction of non-communicable diseases in Nepal.

**Keywords:** association; health institutions; non-communicable diseases; prevalence; risk factors.