# Non-communicable Diseases in Nepal Research Roundup

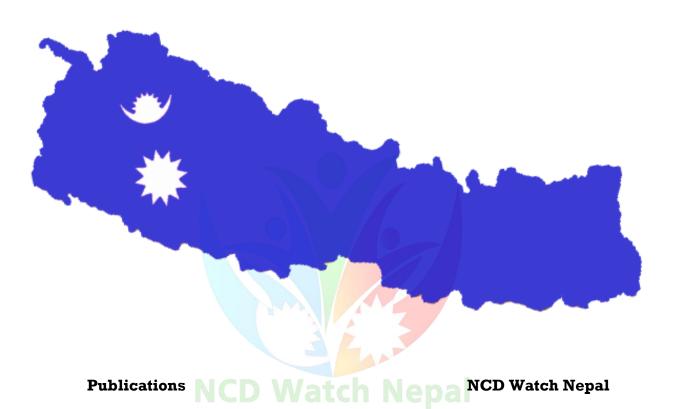
Making non-communicable diseases a national priority



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### Non-communicable Diseases in Nepal-Research Roundup

**April 2024** 















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#### **Roundup Summary**

In April 2024, our search on non-communicable diseases and mental health related literature in Nepal yielded 9 published articles. Most of the studies covered the topics of mental health followed by cardiovascular diseases among a diverse population.

Prevalence of common risk factors of major noncommunicable diseases among sexual and gender minorities in Kathmandu valley, Nepal

**DOI:** https://doi.org/10.1097/md.000000000037746

**Context:** Little is known about the NCDs risk profile of sexual and gender minorities (SGMs) in Nepal.

**Methodology:** A cross-sectional study was conducted among 140 SGMs in Kathmandu valley, Nepal.

Key message: More than two-thirds of the participants (68.6%) had co-occurrence of NCDs risk factors. The prevalence of insufficient fruits and vegetables consumption, current smoking, harmful alcohol consumption, overweight/obesity, and hypertension were 95.7%, 40.0%, 32.9%, 28.5%, and 28.6%, respectively. There was a significant association between hypertension, harmful alcohol consumption, and overweight/obesity with the participants' age, employment status, and marital status, respectively.

The influence of COVID-19 pandemic on the mental health of pharmacists as frontline health care providers in Nepal

DOI: https://doi.org/10.1016/j.heliyon.2024.e29132

**Context:** Pharmacists have been exposed to a variety of dangers during COVID-19 pandemic that have an impact on their mental health.

**Methodology:** A descriptive cross-sectional quantitative study was conducted in three provinces of Nepal involving 243 pharmacists. The 16-item Oldenburg Burnout Inventory (OLBI) was used to assess mental health and wellbeing and burnout.

**Key message:** This study found a negative impact of COVID-19 on the mental health and wellbeing of 33.7% of pharmacists. A strong and meaningful positive relationship and linear regression were observed between exhaustion, disengagement, burnout, mental health and wellbeing. Pharmacists working part-time in hospital settings experienced burnout as a result of insufficient training, extended working hours, and stress both on and off the job.

The burden of anxiety, depression, and stress, along with the prevalence of symptoms of PTSD, and perceptions of the drivers of psychological harms, as perceived by doctors and nurses working in ICUs in Nepal during the COVID-19 pandemic; a mixed method evaluation

**DOI:** https://doi.org/10.1186/s12913-024-10724-7

**Context:** Nurses and doctors in critical care faced longer working hours, increased burden of patients, and limited resources during COVID-19 pandemic in Nepal.

**Methodology:** This was a mixed-methods cross-sectional study in Nepal with ICU doctors and nurses. The online survey consisted of assessment tools for anxiety, depression, stress, PTSD, and alcohol dependence.

**Key message:** In this study, 28% participants experienced moderate to severe symptoms of depression; 50% experienced moderate or severe symptoms of anxiety; 85% had scores indicative of moderate to high levels of stress; and 46% reported symptoms of PTSD. Nurses experienced more severe symptoms of depression, anxiety, and PTSD compared to nurses.

Gender differences in the prevalence of anxiety and depression and care seeking for mental health problems in Nepal: Analysis of nationally representative survey data

DOI: https://doi.org/10.1017/gmh.2024.37

**Context:** Assessing gender disparity in mental health is crucial for targeted interventions.

**Methodology:** This study analyzed data from the 2022 Nepal Demographic and Health Survey employing the Generalized Anxiety Disorder 7 scale (GAD-7) and Patient Health Questionnaire (PHQ-9) scales for anxiety and depression symptoms, respectively.

**Key message:** Women had a higher point prevalence of anxiety (21.9% vs. 11.3%) and depression (5.4% vs. 1.7%) than men. Large variations were noted in gender disparities in the prevalence of anxiety and depression, influenced by age, geographical areas, level of education and household wealth. This study highlighted the need for gender-focused mental health interventions in Nepal and globally.

Examining the association between perceived stigma, its correlates, and restrictions in participation among persons with disabilities in Nepal: a cross-sectional study

DOI: https://doi.org/10.1186/s12889-024-18682-9

**Context:** Disability stigma is one of the most persistent and complex barriers limiting persons with disabilities (PwDs) from enjoying their rights and opportunities.

**Methodology:** A cross-sectional survey was conducted among 371 PwDs in Bara, Rautahat and Makawanpur districts of Nepal. The Explanatory Model Interview Catalog (EMIC) stigma scale and P-scale suitable for people affected by stigmatized conditions were used.

**Key message:** The mean stigma score was 16.9 (SD 13.8) with 42% of respondents scoring higher than the mean. The scores differed significantly by disability type, caste and ethnicity, education, occupation, and household wealth. Fifty-six percent of participants reported facing a high degree of restrictions in participation. A significant negative linear correlation was observed between education and participation restriction.

Perceptions on violence against women and its impacts on mental health and response mechanisms among community-based stakeholders: a qualitative study from Nepal

#### **DOI:** https://doi.org/10.1186/s12905-024-03064-5

Context: Approximately one in four women in Nepal have been exposed to any forms of violence in Nepal. However, violence against women (VAW) prevention has been underresearched in low- and middle-income countries, including Nepal.

Methodology: An explorative qualitative study was conducted in Madhesh Province, southern Nepal. A total of 21 interviews, including 15 in-depth interviews (IDIs) with health care providers, three IDIs with women seeking general or maternal and child health services, three key informant interviews with the local stakeholders, and one focus group discussion with violence survivors.

Key message: In this study, participants reported that verbal and physical violence is often perceived as a normal part of women's lives. Sociocultural traditions such as dowry, child marriages and son preference were identifiable triggers for VAW, causing significant physical injuries and mental health problems. Health care providers reported that violence survivors often hide their experiences of violence and do not seek any kind of help. Local stakeholders emphasized the importance of engaging community leaders and garnering support from both women and men in interventions designed to reduce VAW and its impacts on mental health.

# Effects of a dietary intervention on cardiometabolic risk and food consumption in a workplace

#### DOI: https://doi.org/10.1371/journal.pone.0301826

**Context:** Worksite-based health programs have shown positive impacts on employee health and have led to significant improvements in cardiovascular risk factor profiles.

**Methodology:** This is a one-arm pre-post intervention study involving 277 non-pregnant hospital employees aged 18–60 with prediabetes or pre-hypertension at Dhulikhel Hospital—Kathmandu University Hospital (DH-KUH). All four cafeterias in the hospital premises

received cafeteria intervention encouraging healthy foods and discouraging unhealthy foods for six months.

**Key message:** This study reported a decrease in consumption of refined grains and an increase in consumption of whole grains, unsaturated fats, fruits, and nuts observed a modest reduction in blood pressure and LDL cholesterol following a 6-month cafeteria-based worksite intervention.

#### Stress Among Undergraduate Medical Students in a Medical College of Nepal

#### DOI: https://bjhs.com.np/bjhs/index.php/bjhs/article/view/526

**Context:** Medical education imposes significant stress on students, affecting their psychosocial well-being and academic performance.

Methodology: This was a cross-sectional study conducted among 324 medical students at Birat Medical College Teaching Hospital, Nepal. The Medical Student Stressor Questionnaire was used to assess Academic Related Stressor (ARS), Intrapersonal and Interpersonal related stressor (IRS), Teaching and Learning Related Stressor (TLRS), Social Related Stressor (SRS), Drive and Desire Related Stressor (DRS) and Group Activities Related Stressor (GARS).

**Key message:** About 47% of the participants had a high level of ARS, 63.27% participants had moderate level IRS, 51.23% participants had moderate level TLRS, 56.79% participants had moderate level SRS, and 46.9% participants had moderate level DRS. Significant association was found among different domains of stressors and years of medical education.

Congenital Heart Disease among Children Undergoing Echocardiography in the Department of Pediatrics of Tertiary Care Centre: A Descriptive Cross-sectional Study

DOI: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11025490/

**Context:** Congenital heart disease in children is a major cause of infant mortality and morbidity.

**Methodology:** This is a descriptive cross-sectional study carried out in the Department of Pediatrics at Nepal Medical College and Teaching Hospital where all children (0-18 years) suspected to have congenital heart disease were enrolled.

**Key message:** The proportion of patients diagnosed to have cardiac disorders was 73% with male children being predominant (66.3%). This study concluded that early recognition of cardiac diseases is crucial for preventing morbidity and mortality.

We thank you all for joining our initiative to promote evidence-informed policymaking and promote public awareness of the non-communicable disease (NCDs) and related issues in Nepal- we are committed to staying up to date with the latest NCD research in Nepal.

This issue covers a summary of scientific publications on NCDs in Nepal for the month of April 2024.

Should you have colleagues who'd like to receive these updates via email (ncdwatchnepal@gmail.com)

Individual summary of the round-up is also available on our social media outlets:

- ⇒ Twitter: <a href="https://twitter.com/NCDWatchNepal">https://twitter.com/NCDWatchNepal</a>
- ⇒ Facebook: <a href="https://www.facebook.com/NCDWatchNepal">https://www.facebook.com/NCDWatchNepal</a>
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Please join us and share with relevant colleagues. As always, previous editions of the round-up are available in our archive here at

https://ncdwatchnepal.wordpress.com/research-round-up/

https://nepalhealthfrontiers.org/publication\_type/ncd-watch-nepal-research-roundup/

#### **Publications**



#### **NCD Watch Nepal**



# Let's unite to beat NCDs. #actOnNCDs #beatNCDs