

Non-communicable Diseases in Nepal Research Roundup

Making non-communicable diseases a national priority

Volume: V

Issue: III

March 2024

Online Access at: <https://nepalhealthfrontiers.org/ncd-watch-nepal>



Suggested Citation:

NCD Watch Nepal: Non-communicable Diseases in Nepal-Research Roundup March 2024. Adhikari TB, Paudel K, Bhusal S, Neupane D. vol. V, issue III, Kathmandu Nepal: 2024: 4.21.

Non-communicable Diseases in Nepal-Research Roundup

March 2024



Publications

NCD Watch Nepal

NCD Watch Nepal

Scan me!



Scan me!



TABLE OF CONTENTS

<i>Sexual Dysfunctions among Diabetic and Non-diabetic People Attending in Tribhuvan University Teaching Hospital, Kathmandu Nepal</i>	2
<i>Mental Health of Mothers with Malnourished Children in Nepal: A Prospective Observational Study</i>	2
<i>Depression and anxiety status among informal caregivers of patients with cancer treated at selected tertiary hospitals in Nepal</i>	3
<i>Preferences for mHealth Intervention to Address Mental Health Challenges Among Men Who Have Sex With Men in Nepal: Qualitative Study</i>	3
<i>Use of Health Care Services and Its Associated Factors Among People With Type 2 Diabetes in Nepal</i>	3
<i>Performance of Distress Thermometer: A Study among Cancer Patients</i>	4
<i>Experience of Mindfulness Meditations Based on Stress Reduction among Undergraduate Nursing Students, Chitwan, Nepal</i>	4
<i>Acute Myocardial Infarction in Women, a Study on Risk Factors, Angiographic Features and Outcomes</i>	4
<i>Role of Perceived Social Support in Adherence to Antihypertensives and Controlled Hypertension: Findings of a Community Survey from Urban Nepal</i>	5
<i>Factors associated with depressive symptoms among returnee migrants and non-migrants working adults in Madi municipality in Nepal: a community-based cross-sectional study</i>	5
<i>Prevalence of multimorbidity and its associated risk factors among population of Mechinagar municipality of Nepal</i>	6
<i>Belief and Risk Factors Associated with Suicidal and Self-harm Behaviour among Young Adults of Kathmandu District</i>	6
<i>Self-care management and social support among people with type 2 diabetes attending selected diabetes clinics in Pokhara</i>	6
<i>Prevalence of non-communicable disease risk factor among the adult population of Bharatpur metropolitan city, Chitwan, Nepal</i>	7
<i>Factors associated with uptake of breast and cervical cancer screening among Nepalese women: Evidence from Nepal Demographic and Health Survey 2022</i>	7
<i>Prevalence and Correlates of Depressive and Generalised Anxiety Symptoms Among Female Adolescents in Nepal: Results of a Cross-sectional National Population-Based Survey in 2022</i>	8

Roundup Summary

In March 2024, our search on non-communicable diseases and mental health related literature in Nepal yielded 16 published articles. Most of the studies covered the topics of mental health followed by diabetes, cancer, and cardiovascular diseases.

Sexual Dysfunctions among Diabetic and Non-diabetic People Attending in Tribhuvan University Teaching Hospital, Kathmandu Nepal

DOI: <https://pubmed.ncbi.nlm.nih.gov/38615226/>

Context: Men with diabetes are more likely to have erectile dysfunction (ED) than non-diabetics, and they may also experience other sexual issues.

Methodology: This cross-sectional study was conducted among 350 participants, with 52.6% having diabetes at Tribhuvan University Teaching Hospital in Nepal. The International Index of Erectile Function (IIEF-5) and Female Sexual Function Index- 6 (FSFI-6) were used to assess sexual dysfunction among male and females respectively.

Key message: Prevalence of erectile dysfunction among diabetic and non-diabetic were found to be 81.5% and 65.1% respectively. This study highlights an association of sexual dysfunctions with individuals with diabetes, male sex, tobacco use, and hypertension.

Mental Health of Mothers with Malnourished Children in Nepal: A Prospective Observational Study

DOI: <https://pubmed.ncbi.nlm.nih.gov/38616599/>

Context: Maternal mental health may influence the nutritional status of their children.

Methodology: A prospective observational study was conducted at the Nutrition Rehabilitation Center of a tertiary level hospital situated in central Nepal. The study sample consisted of mothers (n=191) and their malnourished children admitted to the nutrition rehabilitation center. Anxiety and depression were evaluated using Generalized Anxiety Disorder Scale (GAD-7) and Patient Health Questionnaire (PHQ-9), respectively.

Key message: At admission, 12% of mothers of children with malnutrition had anxiety, depression, or both, which decreased to 3.0% at the time of discharge.

Depression and anxiety status among informal caregivers of patients with cancer treated at selected tertiary hospitals in Nepal

DOI: <https://doi.org/10.1016/j.jtumed.2024.03.007>

Context: Cancer places a substantial burden on both patients and their caregivers. Frequent stress among caregivers often affects their mental well-being.

Methodology: In this cross-sectional study, 383 informal caregivers from three prominent cancer specialist hospitals in Nepal were surveyed with the Hospital Anxiety and Depression Scale (HADS).

Key message: The prevalence of moderate to severe anxiety (52%) and depression (45%) among caregivers was notable. Caregivers of patients treated at non-governmental hospitals were six times more likely (OR 6.3, 95% CI: [3.6-10.9]) to have anxiety and five times more likely (OR 5.3, 95% CI: [8.3-19.3]) to have depression.

Preferences for mHealth Intervention to Address Mental Health Challenges Among Men Who Have Sex With Men in Nepal: Qualitative Study

DOI: <https://doi.org/10.2196/56002>

Context: Men who have sex with men (MSM) are disproportionately burdened by poor mental health. Despite the increasing burden, evidence-based interventions for MSM are largely nonexistent in Nepal.

Methodology: This is a qualitative study that involved Five focus group (FG) sessions among 28 MSM in Kathmandu, Nepal.

Key message: Participants suggested a smartphone app with features such as a mental health screening tool, digital consultation, helpline number, directory of LGBTIQ+ friendly providers, mental health resources, and a discussion forum for peer support as potential solutions to mental health challenges and stigma.

Use of Health Care Services and Its Associated Factors Among People With Type 2 Diabetes in Nepal

DOI: <https://doi.org/10.1177/10105395241236058>

Context: The utilization of health care services plays a significant role in managing type 2 diabetes mellitus (T2DM) by enhancing the interaction between health care providers and patients.

Methodology: This study includes cross-sectional data from a randomized controlled trial (RCT) implemented in rural and urban communities of Nuwakot and Kavrepalanchowk districts of

Nepal. Data on the utilization of health care services were assessed in 481 adults aged 30 to 70 years with T2DM.

Key message: Visit to health care facilities within the last 6 months was 66.1% among the people with T2DM living in rural and urban areas of Nepal. Visit to specialists, emergency departments, and hospital admission was generally low among the study participants.

Performance of Distress Thermometer: A Study among Cancer Patients

DOI: <https://pubmed.ncbi.nlm.nih.gov/38615220/>

Context: The Distress Thermometer accompanied with Problems List is a commonly used screening tool for psychosocial distress.

Methodology: This cross-sectional study enrolled 162 heterogeneous cancer patients. Receiver Operating Characteristic analysis of distress thermometer scores was evaluated against Hospital Anxiety and Depression Scale-Total (≥ 15).

Key message: Receiver Operating Characteristic analysis showed an excellent discriminating performance (Area Under the Curve = 87.4%). This study concluded that the distress thermometer with a cut-off score of 4 accompanied with problems list is a valid instrument for screening psychosocial distress in Nepali cancer patients.

Experience of Mindfulness Meditations Based on Stress Reduction among Undergraduate Nursing Students, Chitwan, Nepal

DOI: <https://pubmed.ncbi.nlm.nih.gov/38615214/>

Context: Mindfulness Meditations based on Stress Reductions have been found to promote psychological well-being and mental health.

Methodology: Qualitative Hermeneutic Phenomenology research design was adopted. A total of three Focused Group Discussions was carried out among 12 nursing students in each group who had been practicing Mindfulness Meditation for 6 weeks.

Key message: Mindfulness-based meditations have been found effective strategies among undergraduate nursing for the management of stress during daily living and during examinations, development of self-realization, increase inner peace, self-acceptance and developed skills for future role for advocating mindfulness meditations.

Acute Myocardial Infarction in Women, a Study on Risk Factors, Angiographic Features and Outcomes

DOI: <https://pubmed.ncbi.nlm.nih.gov/38615223/>

Context: In Nepal, there is a rising trend of Coronary Artery Disease and myocardial infarction in women.

Methodology: This was a cross sectional study done among 178 women attending Shahid Gangal National Heart Center Kathmandu.

Key message: Among the participants, 85.9 % had ST-segment elevation myocardial infarction and 14.0% had non-ST segment elevation myocardial infarction. Major risk factors were central obesity (94.6%), dyslipidemia due to low HDL (78.7%), hypertension (54.5%), smoking (54.5%) and type 2 diabetes (34.8%).

Role of Perceived Social Support in Adherence to Antihypertensives and Controlled Hypertension: Findings of a Community Survey from Urban Nepal

DOI: <https://doi.org/10.2147/ppa.s455511>

Context: Social support is considered vital for effective management of chronic conditions.

Methodology: This study analyzed cross-sectional data collected at baseline from 1252 hypertensive individuals enrolled in a cluster randomized trial in Budhanilkantha municipality, Kathmandu, Nepal. Adherence to antihypertensives was measured using the Morisky medication adherence scale – 8.

Key message: This study found that 914 (73%) individuals received moderate to high social support. The proportion of good adherence to antihypertensives did not differ between the social support categories.

Factors associated with depressive symptoms among returnee migrants and non-migrants working adults in Madi municipality in Nepal: a community-based cross-sectional study

DOI: <https://doi.org/10.1186/s12889-024-18313-3>

Context: It is not well understood whether international labor migrants from Nepal who return to Nepal are at higher risk of developing mental health problems.

Methodology: This is a cross-sectional study among 725 nepali workers (non migrants and returning migrants) in Madi municipality, Nepal. The 21-item Beck Depression Inventory (BDI-21) questionnaire was used to assess depressive symptoms.

Key message: The overall prevalence of depressive symptoms was 10.1%. However, the prevalence of depressive symptoms was lower (7%) among returnee migrants compared to non-migrants (13.7%). Men in the lower income group had a higher chance of having depressive symptoms. Similarly, participants with more than two children had a higher chance of having depressive symptoms.

Prevalence of multimorbidity and its associated risk factors among population of Mechinagar municipality of Nepal

DOI: <https://doi.org/10.1177/26335565241237892>

Context: Multimorbidity results in higher mortality, frequent use of medical services, and consequently higher healthcare costs.

Methodology: Community-based cross-sectional study was conducted among 590 adults in the Mechinagar municipality of Jhapa District, Nepal. Multimorbidity assessment questionnaire for primary care (MAQ-PC) was used to assess prevalence of multimorbidity.

Key message: The prevalence of multimorbidity was 22.4%. Hypertension, diabetes mellitus, and COPD was seen in 39.2%, 7.8%, and 4.4% of the participants respectively. The study revealed that participants with increasing age, working individuals, physical inactivity and family history of kidney disease were more vulnerable to having multimorbidity.

Belief and Risk Factors Associated with Suicidal and Self-harm Behaviour among Young Adults of Kathmandu District

DOI: <https://pubmed.ncbi.nlm.nih.gov/38615215/>

Context: Suicide is the fourth leading cause of death among the age group 15-29 years in the world.

Methodology: A descriptive cross-sectional study was conducted among a total of 242 young adults of the Kathmandu district.

Key message: Among the participants, 28.5% reporting suicidal behaviours including making a plan or suicidal ideation or attempts, and 18.5% with self-harm behaviours. Avoidance and emotional discharge were found as common coping strategies adopted by participants. Belief, family functioning, depression status and self-harm behaviour were found statistically associated with suicidal behaviour.

Self-care management and social support among people with type 2 diabetes attending selected diabetes clinics in Pokhara

DOI: <https://jcmc.com.np/jcmc/index.php/jcmc/article/view/1421>

Context: Social support plays a significant role in determining the self-care management of individuals with diabetes.

Methodology: In this multisite cross-sectional study, 158 individuals with type 2 diabetes who attended selected diabetes clinics in Pokhara Nepal, were included.

Key message: More than half (53.2%) of respondents had satisfactory levels of diabetes self-care management, and most of them received high levels of social support. Levels of self-care management were significantly associated with social support. Marital status, family income, residency, educational status, disease duration, regular follow-up visits, and co-morbidity were significantly associated with self-care management.

Prevalence of non-communicable disease risk factor among the adult population of Bharatpur metropolitan city, Chitwan, Nepal

DOI: <https://jcmc.com.np/jcmc/index.php/jcmc/article/view/1469>

Context: Non-communicable diseases (NCDs) are the leading causes of disease burden worldwide.

Methodology: A descriptive, community-based cross-sectional study was conducted among 310 respondents residing in Bharatpur Metropolitan.

Key message: The prevalence of current smoking, alcohol consumption, low intake of vegetables and fruits, raised salt intake and low physical activity was found to be 18.1%, 38.7%, 94.6%, 80% and 66.5% respectively. Regarding metabolic risk factors, the prevalence of ever-raised blood pressure, blood sugar and cholesterol was 50%, 28.4% and 17.4% respectively.

Factors associated with uptake of breast and cervical cancer screening among Nepalese women: Evidence from Nepal Demographic and Health Survey 2022

DOI: <https://doi.org/10.1371/journal.pgph.0002971>

Context: Breast cancer screening (BCS) and cervical cancer screening (CCS) are integral parts of initiatives to reduce the burden associated with these diseases.

Methodology: This study analyzed data from 7,130 Nepalese women aged 30 to 49 years using data from the Nepal Demographic Health Survey (NDHS) 2022.

Key message: The uptake of BCS and CCS among Nepalese women aged 30 to 49 years were 6.5% and 11.4% respectively. Women from Terai region (vs women from mountain) and those engaged in agriculture (vs non working women) had lower odds of BCS uptake. Older women and women with secondary education had higher odds of CCS uptake. Similarly, married women and those with health insurance had higher odds of CCS.

Prevalence and Correlates of Depressive and Generalised Anxiety Symptoms Among Female Adolescents in Nepal: Results of a Cross-sectional National Population-Based Survey in 2022

DOI: <https://link.springer.com/article/10.1007/s10560-024-00963-2>

Context: Globally, it is estimated that 14% of adolescents (10–19 years) have a mental disorder, contributing to 13% of the global burden of disease among adolescents.

Methodology: This study is based on the nationally representative population-based survey, Nepal Demographic and Health Survey (NDHS). Female adolescents (N = 1379; 15–19 years) in Nepal are analyzed in this study, major depressive disorder symptoms (MDDs) was assessed with the PHQ-9 and and generalized anxiety disorder symptoms (GADs) with the GAD-7.

Key message: The prevalence of MDDs and GADs were 7.8% and 13.4%, respectively. In multivariable models, older age (17–19 years), higher education, greater wealth status, poor self-rated health status, genital sore or ulcer, currently pregnant, pregnancy loss, alcohol use, and early sexual debut were positively associated with MDDs. Similarly, older age, greater wealth status, living in the Terai region, poor self-rated health status, current alcohol use, pregnancy loss, and big problems with getting permission for medical help were positively associated with GADs.



NCD Watch Nepal

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 March 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: <https://twitter.com/NCDWatchNepal>
- ⇒ Facebook: <https://www.facebook.com/NCDWatchNepal>
- ⇒ LinkedIn: <https://www.linkedin.com/company/ncd-watch-nepal/>

Please join us and share with relevant colleagues. As always, previous editions of the round-up are available in our archive here at

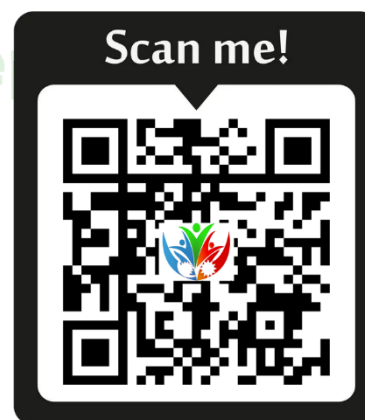
<https://ncdwatchnepal.wordpress.com/research-round-up/>

https://nepalhealthfrontiers.org/publication_type/ncd-watch-nepal-research-roundup/

Publications



NCD Watch Nepal



Let's unite to beat NCDs.

#actonNCDs #beatNCDs