

# Non-communicable Diseases in Nepal Research Roundup

*Making non-communicable diseases a national priority*

Volume: IV

Issue: 1

January 2023

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



Suggested Citation:

1

NCD Watch Nepal: Non-communicable Diseases in Nepal-Research Roundup January 2023. Adhikari TB, Paudel K, Bhusal S, Neupane D. vol. IV, issue 1, Kathmandu Nepal: 2023: 2.15.

# Non-communicable Diseases in Nepal-Research Roundup

January 2023



Publications **NCD Watch Nepal** NCD Watch Nepal



# TABLE OF CONTENTS

<i>Roundup Summary</i> .....	2
<i>Burden and risk factors of chronic respiratory diseases in Nepal, 1990–2019: An analysis of the global burden of diseases study</i> .....	2
<i>Validation of the Cancer Stigma Scale in Nepalese Women</i> .....	2
<i>Barriers to mental health care access in Nepal</i> .....	3
<i>Anxiety and depression among people with type 2 diabetes visiting diabetes clinics of Pokhara Metropolitan, Nepal: a cross-sectional study</i> .....	3
<i>Factors Associated with Medication Adherence among Patients with Type 2 Diabetes Mellitus: A Hospital-Based Cross-Sectional Study in Nepal</i> .....	3
<i>Pretraining Skills as Predictors of Competence of Nonspecialists in Delivery of Mental Health Services</i> .....	4
<i>Clinical pharmacists' intervention on pain management in cancer patients (PharmaCAP trial): study protocol for a randomized controlled trial</i> .....	4
<i>Recurrent COVID-19 Waves and Lockdown: Impact on Daily Life and Mental Health of People in Nepal</i> .....	4
<i>Pathways of association between husbands' migration and mental health of their wives who stay behind</i> .....	5
<i>Depressive symptoms and associated factors among persons with physical disabilities in disability care homes of Kathmandu district, Nepal: A mixed method study</i> .....	5
<i>Individual patient-centered target-driven intervention to improve clinical outcomes of diabetes, health literacy, and self-care practices in Nepal: A randomized controlled trial</i> .....	6

**NCD Watch Nepal**

## Roundup Summary

For the month of January 2023, our scoping on non-communicable diseases and mental in Nepal found 11 published articles. Most of the studies were cross-sectional and covered the topic of mental health, cancer, diabetes and respiratory diseases.

### Burden and risk factors of chronic respiratory diseases in Nepal, 1990–2019: An analysis of the global burden of diseases study

**DOI:** <https://doi.org/10.1002/hsr2.1091>

**Context:** The burden of chronic respiratory diseases (CRDs) is disproportionately high in low- and middle-income countries (LMICs) substantially contributing to morbidity and mortality.

**Methodology:** This study is an observational study that analyzed publicly available data from Global Burden of Disease 2019 estimations for Nepal.

**Key message:** This study reported an increased incidence of CRDs however, the prevalence rate was almost stagnant over the period of 30 years. COPD and asthma were the most prevailing CRDs in Nepal. The CRDs in Nepal are mainly attributable to air pollution and smoking. Air pollution and smoking are the main risk factors attributable to CRDs in Nepal. The study recommended more strict measures for air pollution and smoking control and their effective implementation.

### Validation of the Cancer Stigma Scale in Nepalese Women

**DOI:** <https://doi.org/10.31557/apjcp.2023.24.1.207>

**Context:** Cancer stigma is known to have an adverse impact on cancer patients as well as vulnerable groups who are at risk of developing cancer.

**Methodology:** This was a validation study. A total of 426 Nepali women in Kavre district were interviewed after the translation, back-translation, and cross-cultural adaptation of the Cancer Stigma Scale (CASS) into Nepali.

**Key message:** The Nepali CASS demonstrated sufficient internal consistency, reliability, and model fit indices, making it suitable for assessing cancer stigma among Nepali people.

## Barriers to mental health care access in Nepal

**DOI:** <https://doi.org/10.1177/00258172221141293>

**Context:** Mental disorders are stigmatized in Nepal.

**Key message:** Physical illness attracts early medical care, but not a mental illness. There are no asylums for patients suffering from mental illness. The Nepalese government must prioritize it as a serious health issue.

## Anxiety and depression among people with type 2 diabetes visiting diabetes clinics of Pokhara Metropolitan, Nepal: a cross-sectional study

**DOI:** <https://doi.org/10.1136/bmjopen-2022-064490>

**Context:** Mental health complications, mainly anxiety and depression, complicate living with diabetes and its management.

**Methodology:** This was a cross-sectional study among 283 people with T2DM patients visiting selected diabetes centers of Pokhara Metropolitan, Nepal.

**Key message:** The prevalence of anxiety and depression was found to be 31.4% and 36.4% respectively. Factors like perceived social support, comorbidities, severe COVID-19 fear, and sleep dissatisfaction were associated with anxiety and depression among diabetes patients. Strengthening social support and focusing on reducing comorbidity and complications could help to reduce the risk of mental health problems among diabetics.

## Factors Associated with Medication Adherence among Patients with Type 2 Diabetes Mellitus: A Hospital-Based Cross-Sectional Study in Nepal

**DOI:** <https://doi.org/10.3390/ijerph20021537>

**Context:** High mortality from diabetes increases due to complications of uncontrolled sugar. Medication adherence is important to control blood sugar and prevent its complications.

**Methodology:** A cross-sectional study was conducted among 343 Type 2 diabetes patients visiting Dhulikhel Hospital, Nepal. Medication adherence was measured using the eight-item Morisky medication adherence scale (MMAS-8).

**Key message:** It was found that 61% of respondents had high medication adherence; adherence was positively associated with formal education and attendance at diabetes counseling. This study encourages healthcare institutions to provide counseling services to all patients with type 2 diabetes and focus more on those who are less educated.

## Pretraining Skills as Predictors of Competence of Nonspecialists in Delivery of Mental Health Services

**DOI:** <https://doi.org/10.1176/appi.ps.202100691>

**Context:** Training people who are not mental health specialists (task-shared mental health care program) to deliver components of care, has been identified as a core strategy for increasing access to mental health care globally.

**Methodology:** A total of 185 mental health nonspecialists (e.g., auxiliary health workers and health assistants) were assessed at pretraining and post-training (4 months after training and supervision) in a task-shared mental health care program in Nepal.

**Key message:** This study concluded that some pretraining interpersonal skills of nonspecialists may predict overall competence outcomes in task-shared mental health care. In particular, pretraining nonverbal communication skills distinguished participants whose post-training competence was rated as acceptable from those whose rating was not acceptable.

## Clinical pharmacists' intervention on pain management in cancer patients (PharmaCAP trial): study protocol for a randomized controlled trial

**DOI:** <https://doi.org/10.1186/s40545-022-00505-0>

**Context:** Evidence-based services to support cancer patients with pain via clinical pharmacy services are currently lacking.

**Methodology:** This is a protocol for a randomized controlled trial (RCT) to explore the effectiveness of clinical pharmacists (CPs)' input for better therapeutic outcomes for cancer pain management. Cancer patients suffering from pain will be randomly allocated to receive either clinical pharmacy services or the usual standard care.

**Key message:** The feasibility and potential for integrating CP involvement in a multidisciplinary team to improve clinical outcomes of cancer patients with pain will be evaluated through this trial.

## Recurrent COVID-19 Waves and Lockdown: Impact on Daily Life and Mental Health of People in Nepal

**DOI:** <https://doi.org/10.1155/2023/1930093>

**Context:** Recurrent COVID-19 infection and the extension of lockdown have threatened the livelihoods of people, mainly in socioeconomic and mental health dimensions.

**Methodology:** This was a cross-sectional done among 354 Nepalese people specifically the breadwinner of the family in Gandaki Province, Nepal. Mental health condition was assessed using Depression, Anxiety, and Stress Scale-21 items (DASS-21).

**Key message:** The prevalence of depression, anxiety, and stress was 46.6% 42.1%, and 39%, respectively. Lockdown measures such as travel restrictions and the closure of educational institutions, workplaces, and industries, were the major predictors of poor mental health of the people.

### **Pathways of association between husbands' migration and mental health of their wives who stay behind**

**DOI:** <https://doi.org/10.1016/j.ssmmh.2023.100186>

**Context:** When husbands migrate, their wives can experience major life events within private and public spheres.

**Methodology:** This was exploratory research to understand the mental health burden of husbands' labor migration on their wives' mental health. Eighteen in-depth interviews with women whose husbands left home for work and three key-informant interviews with a local health worker, a non-government organization worker, and a psychosocial counselor in western Chitwan, Nepal.

**Key message:** Communication, children as coping and stress-inducing agents, family support, migration history, and social acceptance of labor migration were identified as psychosocial factors. Policymakers and developmental planners should design social support programs targeted at developing interpersonal, communication, leadership, and managerial skills, and promote family-based psychosocial interventions tailored for migrant wives.

### **Depressive symptoms and associated factors among persons with physical disabilities in disability care homes of Kathmandu district, Nepal: A mixed method study**

**DOI:** <https://doi.org/10.1371/journal.pgph.0001461>

**Context:** Persons with physical disabilities are vulnerable groups and are more prone to experience depressive symptoms than the general population.

**Methodology:** This study followed a concurrent triangulation mixed methods design to evaluate depressive symptoms among 162 persons with physical disabilities in Kathmandu, Nepal. Eight in-depth interviews were conducted with participants. Beck's Depression Inventory scale was used to measure depressive symptoms.

**Key message:** This study found that about 77% of the participants with a physical disability had experienced depressive symptoms. Unemployment status and comorbidity had a statistically significant association with depressive symptoms. The policymakers should focus on preventing comorbidity and providing technical skills to persons with physical disabilities to improve their employment status and promote a healthy lifestyle.

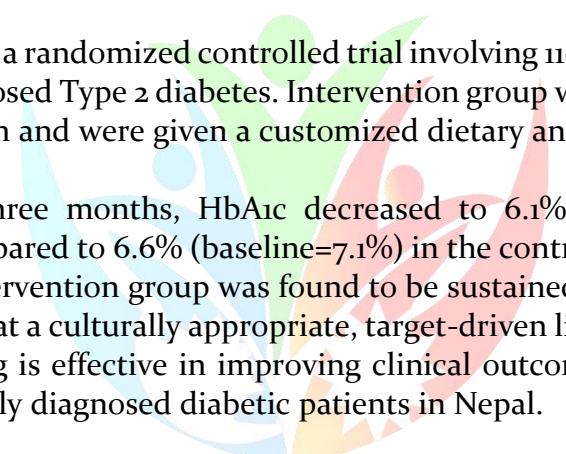
### **Individual patient-centered target-driven intervention to improve clinical outcomes of diabetes, health literacy, and self-care practices in Nepal: A randomized controlled trial**

**DOI:** <https://doi.org/10.3389/fendo.2023.1076253>

**Context:** Improved knowledge and awareness about diabetes is vital in its self-management.

**Methodology:** This was a randomized controlled trial involving 110 participants with newly and consequently diagnosed Type 2 diabetes. Intervention group were trained on a diabetic video education program and were given a customized dietary and physical activity plan.

**Key message:** After three months, HbA1c decreased to 6.1% (baseline=7.2%) in the intervention group compared to 6.6% (baseline=7.1%) in the control group. Health literacy improvement in the intervention group was found to be sustained after three months too. This study concluded that a culturally appropriate, target-driven lifestyle intervention with video education training is effective in improving clinical outcomes, health literacy, and self-care practice in newly diagnosed diabetic patients in Nepal.



**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 January 2023.

Should you have colleagues who'd like to receive these updates via email  
[ncdwatchnepal@gmail.com](mailto: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/](https://nepalhealthfrontiers.org/publication_type/ncd-watch-nepal-research-roundup/)

**Publications**

**NCD Watch Nepal**

Scan me!



Scan me!



**Let's unite to beat NCDs.**

*#actOnNCDs #beatNCDs*