

HIGHLIGHT OF THIS ISSUE

Highlight: Tackling Chronic Kidney Disease in Nepal

CKD Burden:

Nepal faces a severe shortage of kidney care resources—only 56 nephrologists and 60 dialysis centers, mostly in the capital, leaving 85% of the population without access to proper care.

Study Approach:

Analyzed 2019 nationwide survey data, examined CKD trends (1990–2021), and assessed treatment resources.

Key Message:

Expanding health education, screening, lifestyle, intervention and renal replacement therapies is vital. Addressing gender and socioeconomic disparities can improve CKD care accessibility

SPRINGER NATURE Link

Find a journal Publish with us Track your research Search

Home > Journal of Nephrology > Article

Tackling chronic kidney disease in Nepal: from evidence to action

Review | Published: 29 January 2025
(2025) Cite this article

NHIF
NEPAL HEALTH FRONTIERS



Making non-communicable diseases a national priority

NCD - RESEARCH ROUNDUP

VOLUME: VI | ISSUE: I

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

Suggested Citation:

NCD Watch Nepal: Non-communicable Diseases in Nepal-Research Roundup January 2025. Adhikari TB, Paudel K, Bhusal S, Thapa M, Poudel M. vol. VI, issue I, Kathmandu Nepal: 2025: 2.22.

TABLE OF CONTENTS

Tackling chronic kidney disease in Nepal: from evidence to action.....	2
Parental wellbeing, parenting, and child mental health in families with young children in Arghakhanchi, Nepal.....	2
Factors affecting mental health service delivery from primary healthcare facilities of western hilly district of Nepal: a qualitative study	3
The Association of Physical Activity With Overweight/Obesity and Type 2 Diabetes in Nepalese Adults: Evidence From a Nationwide Non-Communicable Disease Risk Factor Survey	3
Health-related quality of life and associated factors in people with Type 2 diabetes mellitus in Nepal: Baseline findings from a cluster-randomized controlled trial	4
Recognizing and addressing burnout among healthcare workers in rural Nepal: a proof-of-concept study using Kern's six-step theoretical framework	4
Exploring the association between sleep quality, internet addiction, and related factors among adolescents in Dakshinkali Municipality, Nepal	4
Prevalence of suicidal ideation and its associated factors among the geriatric population in Vyas Municipality, Tanahun District, Nepal: a cross-sectional study.....	5
Food habit, physical activity and nutritional status of adolescents in selected schools of Madhyapur Thimi municipality, Nepal: A cross-sectional study.....	5
Risk factors of gallbladder cancer in Nepal: A case control study	6
Duration of intervals in the care-seeking pathway of lung cancer in Nepal	6
Awareness and Knowledge of Chemotherapy Among Cancer Patients at Suresh Wagle Memorial Cancer Centre, Kathmandu.....	6
Mental Health Treatment Patterns for Anxiety and Depression among Women in Nepal	7
Are we ready for self-sampling for cervical cancer screening? Insights from service providers and policy makers in Nepal	7
Food insecurity predicts women's mental health in Nepal: Reflections on Southard & Randell	7

Roundup Summary

The collection includes 15 articles focusing on chronic kidney disease, mental health, diabetes, and cancer, with the majority being cross-sectional studies, supplemented by a few reviews, case-control studies, and commentaries.

Tackling chronic kidney disease in Nepal: from evidence to action

DOI: <https://doi.org/10.1007/s40620-024-02200-6>

Context: Chronic kidney disease (CKD) poses a significant burden in Nepal. Despite this high number of cases, Nepal has very few resources to treat CKD, with only 56 kidney specialists (nephrologists) and 60 dialysis centers, most of which are in the capital city. This means only 15% of the population can access proper care.

Methodology: To understand the issue, data was used from a 2019 nationwide survey and studied CKD trends from 1990 to 2021. And also checked the CKD resources of Nepal for treating CKD, like the number of kidney doctors and dialysis centers.

Key Message: Integrating interventions across the care continuum, such as health education and literacy, screening, lifestyle modifications, and improved access to renal replacement therapies, can enhance effective coverage and scalability of care. Additionally, it is crucial to explore and address disparities in access to CKD treatment, including gender and socioeconomic disparities.

Parental wellbeing, parenting, and child mental health in families with young children in Arghakhanchi, Nepal

DOI: <https://doi.org/10.1186/s12887-024-05358-x>

Context: Children's social-emotional development and mental well-being are critical to adult mental health. However, little is known about the mechanisms or factors that contribute to poor child mental health in low- and middle-income countries.

Methodology: This cross-sectional study recruited parents ($N=393$) whose children attended preschool to primary classes in the Arghakhanchi district of Nepal. Data were gathered through parent interviews.

Key Message: Parental mental health problems were higher in families who reported food insecurity, among female parents, less educated parents, and those who perceived themselves on a lower social ladder. Parental mental health, social support, and perceived class were associated with

parent-child conflict. Greater parent-child conflict was associated with decreased social competence and increased anger, anxiety, and depression in children.

Factors affecting mental health service delivery from primary healthcare facilities of western hilly district of Nepal: a qualitative study

DOI: <https://doi.org/10.1136/bmjopen-2023-080163>

Context: The government of Nepal had been unable to provide mental health services universally as basic PHC components and the only programs implemented at the primary care level were community mental health interventions provided by Non-Governmental Organisations

Methodology: A cross-sectional qualitative study was conducted in Arghakhanchi district of Nepal from July to August 2019 that collected information through face-to-face key informant interviews of 16 purposively selected participants using validated interview guidelines.

Key Message: Lack of mental health training and no authority to prescribe psychotropic medications coupled with lack of mental health commodities acted as barriers for mental health service delivery. Awareness regarding mental health and modalities of treatment to the community and provision of training and authority to prescribe psychotropic medicines were recommended by the participants for proper mental health service delivery.

The Association of Physical Activity With Overweight/Obesity and Type 2 Diabetes in Nepalese Adults: Evidence From a Nationwide Non-Communicable Disease Risk Factor Survey

DOI: <https://doi.org/10.1002/osp4.70046>

Context: The rising prevalence of obesity and type 2 diabetes (T2DM) is a significant public health concern, particularly in low- and middle-income countries.

Methodology: This was a secondary analysis of the 2019 non-communicable diseases (NCD) risk factors STEPS survey conducted in Nepal. Demographic and anthropometric data, body mass index (BMI) and T2DM status were collected along with assessment of physical activity using Global Physical Activity Questionnaire (GPAQ).

Key Message: The low rates of physical activity and higher rates of sedentary behavior among adults with overweight/obesity and T2DM in Nepal. Public health interventions promoting physical activity and reducing sedentary behavior may help reduce the burden of these NCDs.

Health-related quality of life and associated factors in people with Type 2 diabetes mellitus in Nepal: Baseline findings from a cluster-randomized controlled trial

DOI:<https://doi.org/10.1177/13591053241302877>

Context: People living with T2DM experience significant impairment in their health related quality of life dimensions, comprising of their physical, mental, social, sexual, cognitive and emotional well-being, as compared to those living without the condition

Methodology : HRQOL of 481 participants with T2DM in Kavrepalanchok and Nuwakot was measured using European Quality of life Visual Analogue Scale (EQVAS) and European Quality of life 5 dimensions (EQ5D) index from the EQ5D-3L tool.

Key Message: Encouraging screening of depressive symptoms, improving awareness on the importance of regular blood glucose monitoring and T2DM self-management education should be incorporated within primary diabetes care to improve HRQOL in Nepal.

Recognizing and addressing burnout among healthcare workers in rural Nepal: a proof-of-concept study using Kern's six-step theoretical framework

DOI:<https://doi.org/10.1186/s12913-025-12294-8>

Context: Healthcare provider burnout is highly prevalent and has negative consequences. However, many healthcare workers in LMICs, including Nepal, rarely recognize or ameliorate it.

Methodology: In the first phase, an online survey was done among nine rural doctors from Charikot Hospital to understand their needs. Based on their responses, educational videos were created, tested, and improved the program in the second phase by checking its impact through surveys and interviews.

Key Message: Burnout as an unrecognized and unreported issue, and its drivers included stigma and feelings of helplessness. Participants praised the interventions and reported that they translated learned skills into practice.

Exploring the association between sleep quality, internet addiction, and related factors among adolescents in Dakshinkali Municipality, Nepal

DOI:<https://doi.org/10.1371/journal.pone.0317747>

Context: Poor sleep quality and internet addiction are significant issues affecting adolescents globally, and Nepal is no exception.

Methodology : A cross-sectional study was conducted among 243 adolescents of Dakshinkali Municipality, Nepal. Pittsburgh Sleep Quality Index and Young's Internet Addiction Test scale were used to measure sleep quality and internet addiction.

Key Message: Almost a quarter of adolescents' experience poor sleep quality, while nearly half screened positive for potential internet addiction. Integrated intervention approaches combining lifestyle modification and family/school support to protect and promote the mental health and well-being of Nepalese adolescents.

Prevalence of suicidal ideation and its associated factors among the geriatric population in Vyas Municipality, Tanahun District, Nepal: a cross-sectional study

DOI: <https://doi.org/10.1186/s12877-025-05677-3>

Context: Suicidal ideation among the geriatric population is a pressing concern, particularly in regions such as Nepal where mental health resources are limited.

Methodology: A cross-sectional study was conducted among individuals aged 60 years and above in Vyas Municipality, Nepal. A total of 311 participants were selected using multistage sampling. The data were collected through face-to-face interviews using a structured interview schedule.

Key Message: This study emphasizes the need to enhance mental health services and strengthen family and community support systems to address suicidal ideation among older adults in Nepal.

Food habit, physical activity and nutritional status of adolescents in selected schools of Madhyapur Thimi municipality, Nepal: A cross-sectional study

DOI: <https://doi.org/10.1371/journal.pgph.0004136>

Context: A dramatic rise in obesity is caused by unhealthy eating habits combined with lower levels of physical activity, and the under nutrition problem is still unresolved.

Methodology: A cross-sectional descriptive study design was conducted in Madhyapur Thimi Municipality. Cluster random sampling technique with validated, self-administered questionnaire was used for data collection.

Key Message: Overweight is more prevalent than underweight. Junk food consumption, mass media advertisement, fruit avoidance, and mothers' occupation status were all key contributors for being overweight among adolescents.

Risk factors of gallbladder cancer in Nepal: A case control study

DOI: <https://doi.org/10.1371/journal.pone.0317249>

Context: Gallbladder cancer (GBC) is a rare, highly fatal disease with diagnosis in advanced stage and low survival rate. Nepal ranked 4th position with highest rates of GBC for 10 countries in 2020.

Methodology: A case-control study was conducted in 2021/22 with newly diagnosed gallbladder cancer cases from three cancer-specialized hospitals and one tertiary (superspeciality) hospital.

Key Message: The study found that having three or more children, belonging to the Terai/Madhese or Janajati ethnic groups, having gallbladder-related disease, drinking alcohol regularly, being exposed to pesticides, and eating few fruits and vegetables increase the risk of gallbladder disease. Among these, being from the Terai/Madhese group and pesticide exposure showed the highest risks.

Duration of intervals in the care-seeking pathway of lung cancer in Nepal

DOI: <https://doi.org/10.3332/ecancer.2025.1825>

Context: Lung cancer is the most commonly diagnosed malignancy and the leading cause of cancer-related deaths in Nepal.

Methodology : A descriptive, cross-sectional study was conducted in the Department of Clinical Oncology, Bir Hospital from July 2023 to April 2024. Patients with newly diagnosed lung cancer were interviewed and data was collected.

Key Message: There is a significant delay in the care-seeking pathway of lung cancer in Nepal. Implementing corrective measures to address these could help improve the outcomes for these patients.

Awareness and Knowledge of Chemotherapy Among Cancer Patients at Suresh Wagle Memorial Cancer Centre, Kathmandu

DOI: <https://doi.org/10.1155/ecc/6384002>

Context: Chemotherapy plays a crucial role in cancer treatment, targeting rapidly dividing abnormal and normal cells, which often leads to significant side effects.

Methodology: A descriptive cross-sectional design was employed at Suresh Wagle Memorial Cancer Centre, Tribhuvan University Teaching Hospital (TUTH), involving 103 cancer patients selected through nonprobability, purposive sampling.

Key Message: The study found that about half of the patients had a moderate understanding of chemotherapy. Patients who received more information had better knowledge, so regular education through brochures, videos, and online resources is recommended to help them better cope with treatment and improve their quality of life.

Mental Health Treatment Patterns for Anxiety and Depression among Women in Nepal

DOI: <https://nepjol.info/index.php/ajps/article/view/73905>

Context: Depression and anxiety are common health problems, especially among women of Nepal, owing to particular cultural, economic, and environmental constraints.

Methodology: This study used data from the most recent survey, the 2022 NDHS.

Key Message: Women who were elderly, educated, and wealthy enjoyed better treatment for depression than marginalized and those in rural areas. Lack of structures and financial constraints prevented professional care and drug usage. The majority of the participants depended on care from their close relatives.

Are we ready for self-sampling for cervical cancer screening? Insights from service providers and policy makers in Nepal

DOI: <https://doi.org/10.1371/journal.pgph.0004114>

Context: Cervical cancer is the leading cancer among women in Nepal, but the country has very low screening rate, with only 8.2% of women being screened.

Methodology: The qualitative research method used semi-structured in-depth interviews and key informant interviews with healthcare providers, online service providers, and policymakers.

Key Message: Self-sampling for cervical cancer screening is an acceptable and practical option

for healthcare providers and policymakers in Nepal. However, challenges like low awareness, cost, confusion about the process, and the need for a centralized system must be addressed for successful implementation and expansion.

Food insecurity predicts women's mental health in Nepal: Reflections on Southard & Randell


DOI: <https://doi.org/10.1016/j.ssmmh.2024.100388>

Context: Food insecurity remains a globally pervasive issue, affecting nearly one-third of the world's population.

Methodology: This is the commentary written by one author.

Key Message: Gendered disparities in food insecurity and mental health are particularly pronounced in South Asia, with Nepali women among the most affected due to caste stratification, patriarchal divisions of labor, intrahousehold food hierarchies, limited mobility, and poor access to care.





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 2025.

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/

NCD Watch Nepal



Publications



Let's unite to beat NCDs.

#actowncds #beatncds