

HIGHLIGHT OF THIS ISSUE

Social patterning of anemia, excess adiposity, and high blood pressure among nonpregnant women aged 20–49 years in Nepal: a cross-sectional analysis of the 2022 demographic and health survey

Introduction:
This nationwide analysis of women aged 20–49 examines how anemia, adiposity, and high blood pressure vary across Nepal's socioeconomic and geographic groups.

Key Message:
Nepal faces overlapping burdens: 32.7% of women had anemia, 34.5% excess adiposity, and 11.2% high blood pressure, with 15.4% carrying at least two. Each followed a different social pattern — by ethnicity, age, or wealth — so no single strategy fits all three.

Methodology:
A cross-sectional analysis of the nationally representative 2022 Nepal DHS used survey-weighted estimates to compare prevalence across seven sociodemographic groups.

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VOLUME: VII | ISSUE: IX

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

Suggested Citation:

NCD Watch Nepal: Non-communicable Diseases in Nepal-Research Roundup September 2026. Adhikari TB, Paudel K, Bhusal S, Thapa M, Poudel M, Sharma N. vol. VII, issue IX, Kathmandu Nepal: 2026: 11.3.

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Roundup Summary

In September 2026, our search of non-communicable disease and mental health-related literature in Nepal identified 21 studies covering a range of public health issues. The topics included cardiovascular disease risk, cancer knowledge, adolescent and maternal mental health, community-based mental health services, physical activity, and other areas relevant to NCD prevention and care.

Distribution of Estimated 5-year Stroke Risk Using the Stroke Riskometer™ Among Adults in Kathmandu, Nepal: A Cross-sectional Study

DOI: https://doi.org/10.31729/jnma.v64i302.9679

Context: Stroke is a leading cause of death and disability worldwide, and Nepal faces a growing burden of non-communicable diseases (NCDs). Community-level evidence on estimated individual stroke risk remains limited, highlighting the need to understand risk distributions to inform future prevention strategies.

Methodology: A community-based cross-sectional study assessed 422 adults aged 20 years and above in Kathmandu Metropolitan City. Five wards were purposively selected, followed by random household sampling and Kish-grid respondent selection. The Stroke Riskometer™ was used to estimate five-year absolute stroke risk, with results summarized using medians and interquartile ranges.

Key message: The median estimated five-year stroke risk was 2.50% (IQR: 1.40–5.80%), ranging from 0.60% to 48.30%. Overall, 61.85% of participants had an estimated risk of at least 2%, based on a study-defined descriptive threshold, while median risk increased from 1.40% among adults aged 20–39 years to 8.80% among those aged 60 years and above. However, these thresholds are not validated clinical categories, and prospective validation against actual stroke outcomes is needed before applying the tool in Nepalese clinical or public health settings.

Social patterning of anemia, excess adiposity, and high blood pressure among nonpregnant women aged 20–49 years in Nepal: a cross-sectional analysis of the 2022 demographic and health survey

DOI: https://doi.org/10.1186/s12889-026-29690-2

Context: Nepal faces a dual burden of anemia and cardiometabolic conditions, including excess adiposity and high blood pressure. Understanding how these conditions differ across socioeconomic and geographic groups is important for designing targeted, equitable public health interventions.

Methodology: This cross-sectional secondary analysis used nationally representative data from the

2022 Nepal Demographic and Health Survey, focusing on nonpregnant women aged 20–49 years. Survey-weighted prevalence estimates and logistic regression models were used to compare the three conditions across seven sociodemographic characteristics, with supplementary analyses examining adjusted prevalence ratios and differences in social patterns.

Key message: Weighted prevalence was 32.7% for anemia, 34.5% for excess adiposity, and 11.2% for high blood pressure. Excess adiposity showed strong associations with age and household wealth, while high blood pressure increased markedly with age; anemia varied most clearly by ethnicity and province. Among women with all three conditions assessed, 15.4% had at least two conditions and 1.8% had all three. These findings highlight the need for differentiated, equity-focused strategies rather than assuming a single targeting approach will adequately address all three conditions.

Hospital-Based Prevalence of Schizophrenia in a Psychiatric Outpatient Department of a Tertiary Care Center in Western Nepal

DOI: https://doi.org/10.22502/jlmc.v14i2.598

Context: Schizophrenia is a severe mental health condition that can substantially affect individuals' functioning, social relationships, and quality of life. Epidemiological evidence from western Nepal remains limited, making hospital-based data valuable for understanding service utilization and informing local mental health planning.

Methodology: This retrospective, record-based descriptive study reviewed psychiatric outpatient department records from a tertiary care centre in western Nepal between January 2022 and December 2023. All patients diagnosed with schizophrenia according to ICD-10 criteria were included through total enumeration. Data were extracted using a semi-structured proforma and analyzed using descriptive statistics.

Key message: Among 7,739 psychiatric outpatient attendees, 192 were diagnosed with schizophrenia, representing a hospital-based prevalence of 2.48%. The prevalence declined from 2.75% in 2022 to 2.17% in 2023. Males accounted for most cases, while adults aged 20–29 years constituted the largest age group in both years. These findings provide baseline evidence to support mental health service planning and highlight the importance of accessible, age-responsive services. However, the hospital-based prevalence should not be interpreted as the prevalence of schizophrenia in the general population.

Socioeconomic Disparities in Cervical Cancer Screening Uptake among Women in Dhulikhel and Banepa Municipalities Nepal

DOI: https://www.kumj.com.np/issue/95/203-208.pdf

Context: Cervical cancer is largely preventable through effective screening and early detection, yet underutilization of screening services remains a public health challenge in Nepal. Understanding socioeconomic and sociodemographic inequalities in screening uptake is essential for designing equitable cancer prevention strategies.

Methodology: This secondary analysis used cross-sectional survey data collected by Dhulikhel Hospital between February 2021 and July 2022. The study included 1,625 women aged 30–60 years eligible for cervical cancer screening in Dhulikhel and Banepa municipalities. Univariable and multivariable logistic regression analyses examined associations between sociodemographic characteristics and screening uptake.

Key message: Overall, 74.2% of participants underwent screening through self-sampling. Screening uptake differed significantly by ethnicity, education, and occupation. Newar women had lower odds of screening than Brahmin/Chhetri women (aOR: 0.7; 95% CI: 0.41–0.91), while women educated beyond secondary level had higher odds than those with no formal education (aOR: 1.6; 95% CI: 1.02–2.4). Homemakers and self-employed women also had lower odds of screening than farmers. These findings highlight the need for targeted, accessible screening initiatives addressing educational and socioeconomic barriers.

A cross-sectional study of health literacy and its association with non-communicable disease risk factors among retired Gurkha veterans in western Nepal

DOI: https://doi.org/10.1186/s12982-026-02941-8

Context: Health literacy influences individuals' ability to access, understand, and use health information and services, with important implications for NCD prevention and management. Retired Nepali Gurkha veterans represent an ageing population that may face challenges transitioning from structured military healthcare to civilian health services.

Methodology: This community-based cross-sectional study interviewed retired Nepali Gurkha veterans in Mathagadhi Rural Municipality, Palpa District, Nepal. Health literacy was assessed across nine domains using the Health Literacy Questionnaire (HLQ), while sociodemographic characteristics, health behaviors, and clinical factors were examined using independent-samples t-tests and multivariate multiple linear regression.

Key message: Health literacy was lowest for navigating the healthcare system (mean: 1.91, SD: 0.77) and highest for social support (mean: 3.56, SD: 0.51). Older age remained independently associated with lower health literacy, while participants without hypertension consistently scored higher across domains in multivariate analysis. These findings highlight the need for veteran-friendly health services, clearer health communication, and improved support to help retired veterans navigate civilian

healthcare and manage NCD risks.

Risk and protective factors for adolescent mental health: reflections on the role of school climate in South Africa and Nepal

DOI: https://doi.org/10.1080/17450128.2026.2737203

Context: School environments play an important role in adolescent mental health, influencing students' sense of belonging, resilience, and psychological wellbeing. In low- and middle-income countries such as Nepal, academic pressures, inadequate school infrastructure, and limited psychosocial support may further affect adolescents' mental health.

Methodology: This exploratory qualitative study examined school climate during the formative phase of the Health Action in Schools for a Thriving Adolescent Generation (HASHTAG) intervention in Nepal and South Africa. Focus group discussions and individual interviews involved 57 adolescents and 72 supportive adults, including teachers and caregivers. Data were analysed thematically using ATLAS.ti.

Key message: Supportive teacher–student relationships and positive peer interactions promoted belonging and resilience, while academic pressure, fear of failure, bullying, and corporal punishment contributed to distress. In Nepal, inadequate infrastructure, particularly unsafe toilet facilities, emerged as an important concern, especially for girls. The findings underscore the need for school-wide mental health interventions that strengthen relationships, improve teacher training and school infrastructure, and provide accessible psychosocial support for adolescents.

How can adolescent engagement shape mental health research? A qualitative exploration of the ALIVE study in Nepal

DOI: https://doi.org/10.1186/s12889-026-29613-1

Context: Adolescent mental health is an emerging public health priority in Nepal, where limited services and persistent stigma can hinder access to appropriate support. Meaningful adolescent participation in research can help ensure that mental health interventions reflect young people's needs, experiences, and perspectives.

Methodology: This qualitative study evaluated adolescent engagement in the ALIVE pilot cluster-randomized controlled trial in Kathmandu between 2022 and 2025. An Adolescent Advisory Group (AAG) involved 22 adolescents aged 12–17 years in intervention co-design, research tool adaptation, and skill-building activities. Data from focus group discussions with 21 adolescents and 10 caregivers, an interview with the lead facilitator, and programme documentation were analysed thematically.

Key message: Adolescent participation evolved from consultation to active contributions to intervention design, research tools, and implementation planning. Participants reported improved confidence, communication, leadership, and emotional awareness, while adolescent input strengthened the contextual relevance and acceptability of research tools. These findings support institutionalizing meaningful, ethical, and age-appropriate adolescent engagement in mental health research and intervention development in Nepal.

Mental health status of LGBT in Kathmandu, Nepal and the role of victimisation, discrimination, connectedness and identity affirmation: a cross-sectional study

DOI: https://doi.org/10.1136/bmjph-2025-004307

Context: Lesbian, gay, bisexual, and transgender (LGBT) individuals in Nepal experience social marginalisation, discrimination, rejection, and violence, which can adversely affect mental health. Understanding the relationship between minority stress and psychological distress is essential for developing inclusive, equitable, and responsive mental health services.

Methodology: This cross-sectional, descriptive and analytical study included 115 LGBT individuals in Kathmandu Valley, recruited through snowball sampling. Data were collected using the Gender Minority and Stress Resilience Measure and the Depression, Anxiety and Stress Scale (DASS-21), and analysed using SPSS with binary and multiple logistic regression.

Key message: Based on DASS-21 severity classifications, 68.7% of participants reported some level of stress, 81.7% anxiety, and 82.6% depression. Gender-related discrimination affected over 78% of participants, rejection over 87%, and victimisation 94.8%. Discrimination was associated with higher odds of anxiety (AOR: 3.83), while rejection was associated with higher odds of anxiety (AOR: 4.61) and depression (AOR: 6.08). These findings highlight the need for stigma-free mental health services and interventions addressing discrimination and social exclusion, while recognising that the small, non-probability sample limits generalisability.

Cross-Cutting Symptom Burden and Health-Related Quality of Life in Hospitalized Patients With Chronic Illness: A Cross-Sectional Study

DOI: https://doi.org/10.1177/00469580261489187

Context: Chronic illnesses can cause substantial symptom burden and reduce health-related quality of life (HRQoL), yet patients' supportive and palliative care needs may remain underrecognized. Understanding these challenges in Nepal is important for improving symptom management and integrating palliative care into routine chronic disease services.

Methodology: This descriptive cross-sectional study included 164 adults admitted to selected tertiary hospitals in Nepal between September and October 2023. Face-to-face interviews used the Edmonton Symptom Assessment System–Revised (ESAS-r) and SF-36 to assess symptom burden and HRQoL. Data were analysed using descriptive statistics, inferential tests, and Spearman's rank correlation.

Key message: High symptom burden was reported by 92.1% of participants, with fatigue the most severe symptom (68.3%), while 65.9% reported poor HRQoL. Symptom burden was strongly negatively correlated with HRQoL ($r_s = -0.620$, $p < 0.001$), indicating that greater symptom burden was associated with poorer quality of life. These findings highlight the need for routine symptom assessment, timely referral for symptom management, and integrated palliative care for people living with chronic illnesses in Nepal.

Feasibility and acceptability of smartphone-based ecological momentary assessment for monitoring suicidal ideation among gay, bisexual, and other men who have sex with men in Nepal

DOI: https://doi.org/10.1080/09638237.2026.2732887

Context: Suicide prevention remains an important mental health priority, particularly among marginalized populations who may face stigma and barriers to support. Smartphone-based ecological momentary assessment (EMA) offers a potential approach to monitoring suicidal thoughts in real time and informing more responsive mental health interventions.

Methodology: This study evaluated the feasibility and acceptability of smartphone-based EMA among gay, bisexual, and other men who have sex with men (GBMSM) in Nepal who had previous suicidal ideation or moderate-to-severe depression. Participants completed three daily smartphone assessments over 30 days, with feasibility assessed through recruitment, retention, and response rates, and acceptability evaluated through exit surveys and interviews.

Key message: Of 50 enrolled participants, 48 (96%) completed at least one assessment, responding to 65.4% of all prompts. Acceptability ratings were high (mean scores 4.0–4.4 out of 5), although privacy concerns and repetitive suicide-related questions were reported. The findings support further evaluation of digital monitoring approaches for suicide prevention, with attention to confidentiality, participant burden, and inclusive mental health support.

Feasibility and acceptability of smartphone-based ecological momentary assessment for monitoring suicidal ideation among gay, bisexual, and other men who have sex with men in Nepal

DOI: https://doi.org/10.1108/IJMHSC-09-2025-0134

Context: Labour migration is an important livelihood strategy in Nepal, but spousal separation may have implications for women's mental health. Understanding the relationship between migration and depression can help identify women who may benefit from preventive mental health services and psychosocial support.

Methodology: This study analysed longitudinal data from 1,899 married women enrolled in the 20-year Chitwan Valley Family Study. Major depressive disorder (MDD) was assessed using a locally validated Nepali version of the Composite International Diagnostic Interview and a life-history calendar. Cox proportional hazards models examined associations between husbands' migration and wives' first onset of MDD, adjusting for individual, household and community characteristics.

Key message: Compared with women whose husbands did not migrate, women whose husbands accumulated 1–24 months of international migration (HR 1.41, 95% CI 1.18–1.69) or internal migration (HR 1.32, 95% CI 1.06–1.64) over five years had higher hazards of first-onset MDD. Associations reversed with longer migration durations. Findings support considering migration-affected women in community-based depression prevention, early identification and psychosocial support initiatives.

Use of the consolidated framework for implementation research to understand the barriers and facilitators for mental health service delivery during health system restructuring and COVID-19 in low-resource settings

DOI: https://doi.org/10.1186/s13033-026-00732-x

Context: Integrating mental health services into primary healthcare is important for improving access in low- and middle-income countries, including Nepal. However, implementation can be constrained by limited resources, stigma, and health system weaknesses, particularly during public health crises and periods of institutional transition.

Methodology: This qualitative implementation study examined the RESHAPE study in Syangja District, western Nepal, where 279 primary care and community health workers across 41 rural health facilities were trained to deliver mental health services between 2019 and 2023. Training and supervision reports, stakeholder consultations, field observations, dissemination summaries, and implementation notes were analysed thematically using the Consolidated Framework for Implementation Research (CFIR).

Key message: Strong partnerships with government stakeholders, alignment with mental health policies, integrated service delivery, and structured supervision facilitated implementation. Barriers included COVID-19 disruptions, weak coordination across government levels, inadequate funding and infrastructure, medication shortages, staff turnover, limited supervisory capacity, provider stigma, and

community distrust in primary care services. Addressing these interconnected challenges is essential to strengthen sustainable, community-based mental health care in Nepal.

Social media addiction and its psychological effects among school students: A cross-sectional study from Kathmandu, Nepal

DOI: https://doi.org/10.61814/jkahs.v9i2.1203

Context: Anterior cruciate ligament (ACL) injuries can result from road traffic accidents and sports-related trauma, often requiring surgical reconstruction. The peroneus longus tendon is increasingly used as a graft, making assessment of potential effects on ankle and foot function important for evaluating surgical outcomes and patient recovery.

Methodology: This hospital-based cross-sectional observational study included 98 patients aged 18–54 years who underwent ACL reconstruction using a peroneus longus tendon graft at UCMS between January 2022 and October 2024, with at least 12 months of follow-up. Ankle and foot function were assessed using the American Orthopaedic Foot and Ankle Society (AOFAS) score, visual analogue scale (VAS), and ankle range of motion (ROM).

Key message: The mean AOFAS score was 95.40 ± 1.17 on the operated side versus 96.55 ± 1.07 on the normal side, with no statistically significant difference. Ankle dorsiflexion, plantar flexion, and inversion were comparable, while eversion showed a statistically significant difference (p=0.013). These findings suggest minimal overall functional impairment, although longer-term follow-up and broader studies could help clarify donor-site outcomes.

Comparing Accelerometer-Measured and Self-Reported Physical Activity Among Adults in Semi-Urban Nepal: Findings From a Community-Based Household Study

DOI: https://doi.org/10.1123/jpah.2026-0412

Context: Accurate physical activity surveillance is essential for preventing noncommunicable diseases (NCDs), including cardiovascular disease and type 2 diabetes. In resource-constrained settings such as Nepal, reliance on self-reported questionnaires may overestimate activity levels and misrepresent progress toward public health recommendations.

Methodology: This cross-sectional study included 423 adults aged 18–69 years in Pokhara, Nepal. Participants completed the Global Physical Activity Questionnaire (GPAQ) and wore a wrist-mounted accelerometer for seven days to measure moderate-to-vigorous physical activity (MVPA), light activity, and sedentary time. A sign test compared paired median estimates.

Key message: Median daily MVPA was 43.3 minutes by GPAQ versus 15.3 minutes by accelerometer, with a median paired difference of 25.7 minutes. GPAQ reported substantially higher estimates of bouted MVPA compared with accelerometry in this semi-urban adult population.

School-based prevalence and factors associated with depressive symptoms among secondary school adolescents in Mahagadhimai Municipality, Nepal

DOI: https://doi.org/10.1371/journal.pgph.0007225

Context: Adolescent depression is an important public health concern that can affect emotional well-being, educational participation, and social relationships. Identifying psychosocial factors associated with depressive symptoms can help Nepal develop targeted, school-based mental health promotion and support strategies.

Methodology: This analytical cross-sectional study included 302 students in grades 11 and 12 from four public schools in Mahagadhimai Municipality, Madhesh Province. Depressive symptoms were assessed using the 20-item Centre for Epidemiological Studies Depression Scale (CES-D-20). Bivariate and multivariable logistic regression identified associated factors, reported as adjusted odds ratios (AORs) with 95% confidence intervals.

Key message: Overall, 39.7% of students reported depressive symptoms, including 18.2% mild, 13.6% moderate, and 7.9% severe symptoms. Significant associations included academic stress (AOR 2.60), problematic social media use (AOR 2.93), poor help-seeking behaviours, low social support, and low self-esteem. These findings highlight potential priorities for school-based mental health awareness, supportive peer and family environments, and accessible help-seeking pathways, while longitudinal research is needed to establish temporal relationships.

Community-Based HPV Self-Sampling to Enhance Access to Cervical Cancer Prevention: A Continuum-of-Care Model from Urban Nepal

DOI: https://doi.org/10.3390/curroncol33090539

Context: Cervical cancer remains a major cause of cancer-related mortality among women in Nepal, where national screening coverage is reported to be approximately 16%. Community-based human papillomavirus (HPV) self-sampling may improve access by reducing barriers related to travel, time, privacy, and household responsibilities.

Methodology: This cross-sectional study was conducted between September 2023 and May 2024 in Ward No. 3 of Lalitpur Metropolitan City. Trained community health workers recruited women aged 30–60 years, provided education and home-based self-sampling kits, and collected demographic

information. Dry cervical swabs from 418 participants were tested for high-risk HPV, with positive cases referred for visual inspection with acetic acid, further diagnostic assessment, and treatment when indicated.

Key message: Participation was 64.1%, and high-risk HPV prevalence was 10.3%; non-16/18 genotypes predominated (55.8%). Six precancerous lesions were identified, including one CIN3 case. The findings support the feasibility of community-based self-sampling linked to follow-up and treatment, offering a potential approach to strengthen cervical cancer prevention in Nepal.

Effect of school health nurse-supported child-to-family strategy for Diabetic Retinopathy prevention in Bhimeshwor Municipality of Bagmati Province, Nepal: A quasi-experimental study

DOI: https://doi.org/10.1371/journal.pone.0357023

Context: Diabetic retinopathy is a major complication of diabetes and a preventable cause of vision loss. Raising awareness and encouraging timely eye examinations and diabetes management are important for prevention, while schools may provide an opportunity to extend health education to families in Nepal.

Methodology: This quasi-experimental pre-test–post-test study involved 140 students in grades 7 and 8 from three government schools in Bhimeshwor Municipality, paired with family members aged 30 years or older. The intervention combined six weeks of school health nurse-led education with student-led health information sessions at home. Quantitative questionnaires and qualitative discussions assessed knowledge, attitudes, self-efficacy, and preventive practices.

Key message: The intervention significantly improved students' diabetic retinopathy knowledge and family members' knowledge, attitudes, perceived behavioral control, and self-efficacy ($p < 0.001$). However, preventive practices, including eye check-ups, blood sugar and blood pressure testing, healthy diets, and physical activity, did not significantly change ($p = 0.875$). These findings suggest that school nurse-supported, child-to-family education can strengthen awareness and behavioral intentions, but sustained follow-up and additional support may be needed to translate knowledge into preventive action.

Intention to quit smoking and associated factors among outpatients at a tertiary hospital in semi-urban Nepal: a cross-sectional study

DOI: https://doi.org/10.1136/bmjph-2024-001610

Context: Tobacco smoking is a major risk factor for noncommunicable diseases, including cardiovascular

disease, chronic respiratory diseases, and cancer. Understanding smokers' readiness to quit can help healthcare providers tailor cessation support and strengthen tobacco control efforts in Nepal.

Methodology: This analytical cross-sectional study included 375 current smokers purposively recruited from the outpatient department of Dhulikhel Hospital between May and June 2021. Data on intention to quit, sociodemographic characteristics, nicotine dependence, motivation, and awareness of cessation services were collected using a structured questionnaire. Multivariable logistic regression identified factors associated with intention to quit.

Key message: Overall, 72.5% of participants intended to quit smoking (95% CI 67.8%–76.8%), although most were classified in the pre-contemplation stage. Higher education, longer smoking duration, and moderate nicotine dependence were associated with greater intention to quit, while a family history of smoking was associated with lower likelihood. These findings support integrating brief cessation advice into outpatient care and strengthening accessible quit-line services and family-centred education, while recognising that intention does not necessarily translate into successful cessation.

Maternal depression as a mediator of preterm birth and child development

DOI: https://doi.org/10.1111/dmcn.70503

Context: Preterm birth is associated with increased risk of infant neurodevelopmental difficulties, while maternal depression may further affect early child development. Understanding how maternal mental health contributes to developmental outcomes can help strengthen integrated maternal, newborn, and infant care in Nepal.

Methodology: This prospective cohort study followed 1,253 mother–infant pairs in Nepal until six months after birth. Preterm birth was identified from medical birth registers, while maternal depression symptoms and infant neurodevelopmental delay were assessed through maternal interviews. Logistic regression-based causal mediation analysis estimated direct and indirect effects, including the proportion mediated by maternal depression.

Key message: Preterm birth was associated with increased odds of infant neurodevelopmental delay (total effect OR 1.12, 95% CI 1.06–1.18). Maternal depression partially mediated this association (ACME OR 1.04, 95% CI 1.02–1.07), accounting for approximately 38% of the total effect, while a significant direct effect remained. These findings support integrating maternal mental health screening and support into follow-up care for preterm infants, alongside developmental monitoring and early intervention.

Knowledge of Cancer among Health Workers in Madi Municipality, Nepal

DOI: https://doi.org/10.64473/ppo.03.02.042

Context: Cancer is a major public health challenge, and early detection and timely referral are important for improving patient outcomes. Health workers play a critical role in cancer awareness, screening, and referral, making their knowledge essential for strengthening cancer prevention and control in Nepal.

Methodology: This descriptive cross-sectional study assessed cancer-related knowledge among 63 health workers in Madi Municipality using a census approach. Data were analysed using SPSS version 22, with descriptive and inferential statistics used to examine knowledge levels and associated factors.

Key message: Overall, 44.4% of health workers had poor cancer knowledge, 31.7% had moderate knowledge, and 23.8% had good knowledge. Only 30.2% had received cancer-related training; among those trained, 94.7% had completed cervical cancer screening training. Knowledge level was significantly associated with the type of health institution (p=0.042). These findings highlight the need for broader, targeted cancer education and training for health workers to strengthen patient counselling, early detection, screening, and referral within local health services.

Estimation of 10-year cardiovascular risk using a non-laboratory-based WHO CVD risk chart among slum adults of Pokhara Metropolitan, Nepal: a cross-sectional study

DOI: https://doi.org/10.1186/s12872-026-06552-8

Context: Cardiovascular diseases (CVDs) are a leading cause of morbidity and mortality worldwide, with prevention depending on early identification and management of risk factors. Adults living in urban slums may face additional barriers to healthcare access, making community-based cardiovascular risk assessment important for equitable prevention in Nepal.

Methodology: This community-based cross-sectional study included 389 adults aged 40–74 years from selected slum areas of Pokhara Metropolitan City. Data were collected using a structured WHO STEPS-based questionnaire, standard blood pressure and anthropometric measurements, and the WHO non-laboratory-based CVD risk chart. Robust Poisson regression assessed factors associated with an estimated 10-year CVD risk of at least 10%.

Key message: Overall, 44.0% had very low, 28.3% low, 24.4% moderate, and 3.3% high estimated CVD risk. Elevated risk was associated with illiteracy (APR 4.40), alcohol consumption, and family history of hypertension, although several associations changed after additional adjustment for age and sex. The findings support targeted community screening and prevention, while highlighting the need to interpret risk-factor associations in light of potential confounding.

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 September 2026.

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

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