



NCD Watch Nepal

Non-communicable Diseases in Nepal

Research Roundup January 2022

Making non-communicable diseases a national priority

Welcome to NCD Watch Nepal Research Roundup

We thank you all for joining our initiative to promote evidence-informed policymaking and promote public awareness on 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 summary of scientific publications on NCDs in Nepal for the month of January 2022.

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

Individual summary of 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/>

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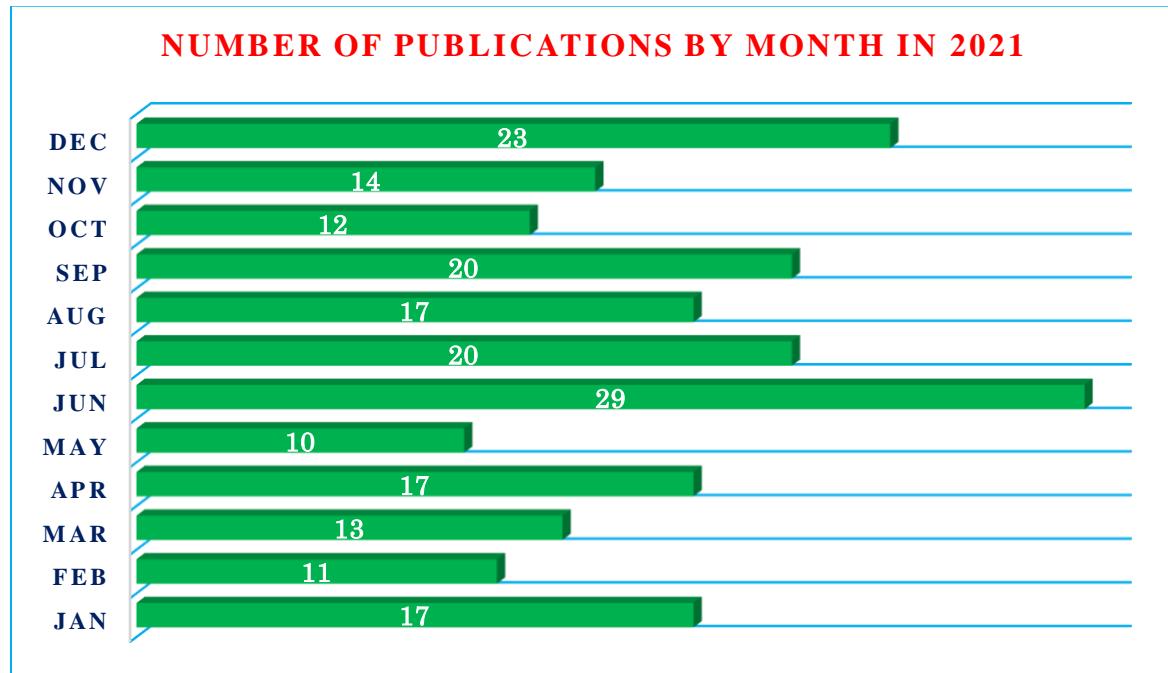
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Summary of the year 2021

In the year 2021, our search mapped all together 203 NCDs related articles from Nepal.



NCDs in Nepal Research Roundup January 2022

Summary

For the month of January 2022, our scoping on non-communicable diseases in Nepal found 14 published articles. Majority of the studies were cross-sectional studies and, covering the topic of cancer, COPD, and mental health.

Psychological distress during COVID-19 among pregnant women attending antenatal outpatient department at tertiary hospital

DOI: <https://jpahs.edu.np/index.php/jpahs/article/view/488>

Context: Pregnant women might be more anxious and stressed during this highly contagious COVID -19 pandemic situation.

Methodology: A cross-sectional analytical study was conducted among 457 pregnant women at the antenatal outpatient department of Patan Hospital, Nepal. Coronavirus Anxiety Scale (5 items) and the Edinburgh Postnatal Depression Scale (10 items) were used to collect the data.

Key message: Psychological distress was found to be minimal among pregnant women attending antenatal OPD in Patan Hospital. Only 1.1% of pregnant women had anxiety, while 5.0% had possible depression due to COVID-19.

Stigma against mental health disorders in Nepal conceptualised with a 'what matters most' framework: a scoping review

DOI: <https://doi.org/10.1017/s2045796021000809>

Context: Stigma related to mental disorders is a barrier to quality mental healthcare.

Methodology: This was a scoping review.

Key message: The findings suggest that 'what matters most' in Nepali culture for service users, caregivers, community members, and health workers include prestige, productivity, privacy, acceptance, marriage, and resources.

Intentional pesticide poisoning and pesticide suicides in Nepal

DOI: <https://doi.org/10.1080/15563650.2021.1935993>

Context: Intentional pesticide poisoning is a major clinical and public health problem in agricultural communities in low and middle-income countries like Nepal.

Methodology: This was a retrospective review of medical records of 10 hospitals for pesticide poisoned patients and two forensic laboratories of Nepal from April 2017 to February 2020.

Key message: This study highlighted that among hospital cases (n = 4148), the commonest form of poisoning was self-poisoning (95.8%) and case fatality was 5.3%. The pesticides identified as causing most deaths were dichlorvos and aluminum phosphide.

Engaging Female Community Health Volunteers (FCHVs) for cardiovascular diseases risk screening in Nepal

DOI: <https://doi.org/10.1371/journal.pone.0261518>

Context: Cardiovascular diseases (CVDs) are one of the major NCDs. Female Community Health Volunteers (FCHVs) in Nepal are the key drivers to implementing frontline health services.

Methodology: This study used multiple approaches (quantitative and qualitative) and was conducted in 3 phases during July and August 2017 in two purposively selected communities of Lalitpur district, Nepal.

Key message: The sensitivity of FCHV screening was 90.3%, and the specificity was 97%. This study concluded that there is a potential for engaging FCHVs to use simple CVD risk screening tools at the community level.

NCD Watch Nepal Lung Cancer in Nepal

DOI: <https://doi.org/10.1016/j.jitho.2021.10.020>

Context: Cancer accounts for 9% of total annual deaths and is the third leading cause of non-communicable disease death in Nepal. Lung cancer is the most common cancer in men (18% of new cases diagnosed) and the third most common cancer in women (7.7%) in Nepal.

Methodology: This was an editorial.

Key message: Despite several limitations with cancer care delivery, there has been improvement in lung cancer management in Nepal. Expansion of health insurance and a proper health policy should be the priority action of the government. This should include provision for essential anticancer drugs available and affordable for all patients with cancer and a priority-based cancer drug authorization

Association between COVID-19 pandemic and the suicide rates in Nepal

DOI: <https://doi.org/10.1371/journal.pone.0262958>

Context: Deteriorating mental health and psychosocial stresses could lead to an increase in suicidal ideation, and under more extreme scenarios, suicide deaths.

Methodology: This is a retrospective study investigating the changes in suicide rates in Nepal during the COVID-19 pandemic period (April 2020 to June 2021). A total of 24350 suicides deaths during four years of the study window were analyzed.

Key message: This study found an overall increase in the monthly suicide rate in Nepal with an average increase of 0.28 (CI: 0.12,0.45) suicide per 100,000 during the pandemic months. The increase in suicide rate was significant both among males (increase in rate = 0.26, CI: 0.02,0.50) and females (increase in rate = 0.30, CI: 0.18,0.43). Sudurpaschim and Karnali provinces had the highest increase in suicide rates associated with the COVID-19 pandemic.

Oncology clinical practice guidelines usage among physicians in Nepal

DOI: <https://doi.org/10.1111/jep.13594>

Context: In the context of LMICs like Nepal, introducing and practicing the guideline is not straightforward due to the lack of strong health financing systems and advanced oncology facilities.

Methodology: This was an online cross-sectional survey conducted from June 2020 to January 2021 among 171 physicians working in the oncology departments of Nepal.

Key message: The most commonly used guideline was the National Comprehensive Cancer Network guideline of the United States (75.5%) followed by the American Society of Clinical Oncology guideline (44.7%). The findings of this study highlighted that the OCPGs developed in high-income countries may not be feasible for low resource settings like Nepal. Comprehensive local OCPGs should be developed considering the available resources, feasibility, and financial constraints of patients.

Discriminative Accuracy of Chronic Obstructive Pulmonary Disease Screening Instruments in 3 Low- and Middle-Income Country Settings

DOI: <https://doi.org/10.1001/jama.2021.23065>

Context: Most of the global morbidity and mortality in chronic obstructive pulmonary disease (COPD) occurs in low- and middle-income countries (LMICs), with significant economic effects.

Methodology: A cross-sectional analysis of discriminative accuracy, conducted between January 2018 and March 2020 in semiurban Bhaktapur, Nepal; urban Lima, Peru; and rural Nakaseke, Uganda.

Key message: The unweighted prevalence of COPD in Nepal was 18.2% (642/3534 participants). The sensitivity ranged from 34.8% (95% CI, 25.3%-45.2%) for COLA-6 in Nepal to 64.2% (95% CI, 60.3%-67.9%) for CAPTURE in Nepal.

Knowledge, attitude, preventive practices and utilization of cervical cancer screening among women in Nepal: a community-based cross-sectional study

DOI: <https://doi.org/10.1097/cej.oooooooooooo00670>

Context: Cervical cancer continues to be a global public health concern and a leading cause of cancer deaths among Nepalese women.

Methodology: A community-based cross-sectional survey was carried out among 729 women 30–60 years of age, between April and June 2019 in a semi-urban area of Pokhara Metropolitan City of Nepal.

Key message: Among the participants, 44.9% were ever screened for cervical cancer. However, only 10.4% of participants received timely repeated screening for cervical cancer. The median knowledge score achieved by participants was 2.0 [interquartile range (IQR) 1–4] on a scale of maximum score 36, the median attitude score was 31.0 (IQR 29–32) on a scale of 40 and the median preventive practice score was 3.0 (IQR 3–4) on a scale of five.

A non-traditional dietary pattern increases risk of coronary artery disease in the Nepalese population

DOI: <https://doi.org/10.1016/j.nut.2021.111503>

Context: Several dietary patterns are associated with cardiovascular diseases. This study aimed to determine dietary patterns linked with coronary artery disease (CAD) in the Nepalese population.

Methodology: Food frequency questionnaires were used to estimate dietary intakes in 306 people with CAD and 306 people in a control group matched for age and sex.

Key message: This study concluded that principal component analysis (PCA) - derived non-traditional dietary patterns can be a risk for developing CAD in Nepalese people. PCA with higher loadings of refined grain, sugar, and meat and lower loadings of milk, whole grain, and fruit was named the non-traditional dietary pattern. A 34% increased risk of CAD (OR, 1.34; 95% CI, 1.14–1.58; $P < 0.001$) was associated with this dietary pattern after adjusting for smoking, physical activity, and cardiometabolic risk factors.

Psychosocial responses to COVID-19 among nurses in two hospitals: a mixed-method study at Eastern Nepal

DOI: <https://doi.org/10.1080/09638237.2021.2022634>

Context: The global COVID-19 pandemic has created a massive public health crisis and numerous challenges for healthcare workers but there are very few studies, focusing on mitigation of mental health problems among nurses.

Methodology: This was a mixed-method study, including 278 nurses from two COVID-19 hospitals in Eastern Nepal. A psychosocial strengthening session was introduced and the effectiveness of the program was assessed after 4–5 weeks of intervention.

Key message: This study concluded that depression, anxiety, and stress are common issues of nurses during the COVID-19 pandemic. Common causes of problems were lack of resources, fear of being infected, and fear of transmitting to family members. Mean scores of depression, anxiety, and stress were significantly decreased after the psychosocial strengthening program.

Abdominal Obesity among Outpatients in a Tertiary Level Eye ENT Hospital: A Descriptive Cross-sectional Study

DOI: <https://doi.org/10.31729/jnma.7253>

Context: Abdominal obesity, as abnormal fat accumulation that presents a risk to health, is a global epidemic.

Methodology: A descriptive cross-sectional study was conducted among outpatients at a tertiary level Eye ENT hospital in Nepal from January 2016 to December 2018.

Key message: Among 25,511 participants, 85.6% had abdominal obesity using the Waist-to-Height Ratio, higher in women 86.4% than men 84.5%.

Guideline based knowledge and practice of physicians in the management of COPD in a low- to middle-income country

DOI: <https://doi.org/10.1111/crj.13468>

Context: Chronic obstructive pulmonary disease (COPD) is the third leading cause of death, with 80% of the total death occurring in low- to middle-income countries (LMICs).

Methodology: A cross-sectional descriptive study using a structured questionnaire was conducted among 152 medical physicians working in Bagmati and Gandaki province of Nepal. Physicians' knowledge and practice were graded according to Bloom's original cut-off point for good ($\geq 80\%$), satisfactory (60%–78%), and poor ($< 60\%$).

Key message: This study highlighted that despite physicians having good knowledge in COPD, the practice in COPD management is below guideline-recommended. The most selected factors hindering the appropriate management of COPD were lack of patient follow-up and lack of professional training in COPD. Other factors included patient unwillingness to discuss smoking quit plan, lack of screening tool, unavailability of spirometry, and physician unawareness of available medicine to treat COPD.

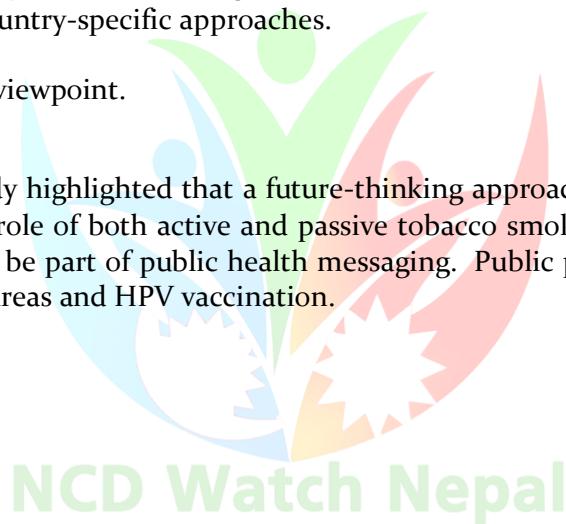
Cancer Prevention Strategies for Nepal

DOI: <https://doi.org/10.31729/jnma.7014>

Context: The major goals for cancer prevention in Nepal are similar to those among high-income countries, but there are major cancer-causing exposure differences, and social contexts, which, of necessity, should direct country-specific approaches.

Methodology: This is a viewpoint.

Key message: This study highlighted that a future-thinking approach to cancer in Nepal must focus on prevention. The role of both active and passive tobacco smoking in multiple major and common cancers needs to be part of public health messaging. Public policies must be developed to address also these two areas and HPV vaccination.



Let's unite to beat NCDs.

#actOnNCDs #beatNCDs