



Non-communicable Diseases in Nepal

Research Roundup December 2021

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 December 2021.

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>

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

VOLUME II
ISSUE 12

Suggested Citation:

NCD Watch Nepal: Non-communicable Diseases in Nepal-Research Roundup Dec 2021. Adhikari TB, Paudel K, Bhusal S, Khanal P, Neupane D. vol. II. Kathmandu Nepal: 2022: 1.15.

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NCDs in Nepal Research Roundup December 2021

Summary

For the month of December 2021, our scoping on non-communicable diseases in Nepal found 22 published articles. Majority of the studies were cross sectional studies and, covering mental health and cardiovascular diseases.

Trend of Head and Neck Cancers in a National Tertiary Cancer Hospital of Nepal from 2012 to 2017

DOI: <https://doi.org/10.1055/s-0041-1731131>

Context: Head and neck cancers (HNCs) are increasing in Nepal and have become a major public health issue.

Methodology: This was a cross-sectional study with secondary data analysis conducted at B.P Koirala Memorial Hospital, Chitwan, Nepal. A total of 4,582 all-new HNCs cases registered from 2012 to 2017 were included in the analysis.

Key message: This study highlighted that the trend of HNCs is increasing in Nepal especially in oral cancers. Lip and oral cavity cancers (46.5%) were the most common HNCs followed by tonsil and pharynx (18.0%) and larynx (15.8%). The trend of HNCs shows a steady rise in incidence with differences according to the sites. HNCs were more common among males than females except for thyroid cancer. The most common age group was 60 to 74 years.

Pathways to mental health care in Nepal: a 14-center nationwide study

DOI: <https://doi.org/10.1186/s13033-021-00509-4>

Context: Pathways to care studies are feasible and tested means of finding the actual routes taken by patients before reaching proper care.

Methodology: This was a cross-sectional, convenience sampling study performed at 14 centers where new cases were being taken.

Key message: This study found that most patients with severe mental illnesses (SMIs) had their first contact with faith healers (49%), then met with medical doctors (13%) or psychiatrists (28%). Marked differences in clinical presentation surfaced when hilly centers were compared with the Terai belt. The study suggested that the employment of more

mental health professionals and better mental health advocacy, public awareness programs, and school education are suggested strategies to improve proper mental health care.

Gender inequality in the global mental health research workforce: a research authorship scoping review and qualitative study in Nepal

DOI: <https://doi.org/10.1136/bmjgh-2021-006146>

Context: Although women's health is prioritized in global research, few studies have identified structural barriers and strategies to promote female leadership and gender equality in the global mental health research workforce, especially in low-income and middle-income countries.

Methodology: This was a mixed-method study to evaluate gender equality in the mental health research workforce in Nepal. The scoping review was conducted to assess gender disparities in the authorship and qualitative interviews were conducted with 22 Nepali researchers to identify structural barriers limiting women's leadership.

Key message: This study found that; of 337 articles identified in mental health, 61% were by Nepali first authors. Among Nepali first authors, 38.3% were women. Nepali women had half the odds of being first authors compared with men when referenced against non-Nepali authors (OR 0.50, 95% CI 1.30 to 3.16). The qualitative analysis identified a lack of gender-friendly organizational policies, difficulties in communication and mobility, and limited opportunities for networking as barriers to women's leadership in global health research.

NCD Watch Nepal

Suicide and deliberate self-harm among women in Nepal: a scoping review

DOI: <https://doi.org/10.1186/s12905-021-01547-3>

Context: As suicide is gradually emerging as a major global public health problem, suicide among men has been given more consideration with relative silence about its impact on women.

Methodology: This was a scoping review based on Arksey and O'Malley's methodological framework.

Key message: Suicide incidence was found to be higher among the younger age group and married women, with poisoning as the most common means of suicide. This study concluded that the socio-cultural and economic factors shape family and marital

relationships which impacts the psycho-social and mental wellbeing of women in Nepal inciting suicidal attempts and deliberate self-harm.

Evidence-based approaches for promoting gender equity in global mental health research: Study protocol for social network analysis of researchers in Nepal

DOI: <https://doi.org/10.1016/j.ssmmh.2021.100032>

Context: Female researchers remain underrepresented in scientific communities, particularly in LMIC where they have limited networking and mentorship opportunities.

Methodology: This is a protocol for a Social Network Analysis (SNA) to evaluate if gender-sensitive, need-based capacity building can improve researchers' networking and mentorship opportunities in Nepal.

Expected outcome: The network characteristics will be mapped for approximately 150 researchers working in Nepal. SNA characteristics in the network (individual density, homophily, and centrality) will be compared with academic productivity (total peer-reviewed publications, h-index), including mediation effects via self-efficacy and outcome expectations.

Nourishing Hope? Changes in Malnutrition and Changes in Girls' Aspirations-Evidence from the Suaahara II Adolescent Girls Panel in Nepal

DOI: <https://doi.org/10.1016/j.jadohealth.2021.10.029>

Context: Malnutrition is a pressing public health challenge in South Asia with adverse consequences for adolescent girls' well-being and, potentially, aspirations as drivers of developmental progress.

Methodology: This study analyzed the two-period panel data from the Suaahara II Adolescent Girls Panel (10–19 years) in Nepal (2018–2019, n = 613).

Key message: The study concluded that thinness and anemia were negatively associated with adolescent girls' aspirations in domains of fertility and education. A change from thinness to no thinness increased girls' aspired ages of having a first child by 2.77 years (standard error [SE] 1.22, p = .025).

Augmenting the Referral Pathway for Retinal Services Among Patients With Diabetes Mellitus at Reiyukai Eiko Masunaga Eye Hospital, Nepal: Protocol for a Nonrandomized, Pre-Post Intervention Study

DOI: <https://doi.org/10.2196/33116>

Context: Diabetic retinopathy (DR) is an important public health issue in Nepal with a huge social and economic impact.

Methodology: This is a protocol for a nonrandomized, pre-, and post-intervention study. Health education on DR will be provided to selected health personnel of the intervention hospital (Scheer Memorial) using information education and communication (IEC) materials.

Expected outcome: Health education intervention could be a low-cost solution to improve the awareness, access, and utilization of retinal health care services; this is an understudied topic in Nepal.

Coronavirus fear among health workers during the early phase of pandemic response in Nepal: A web-based cross-sectional study

DOI: <https://doi.org/10.1371/journal.pgph.0000083>

Context: The psychological implications as a result of disease outbreaks are often neglected by the health system. Health workers involved in the COVID-19 response might be at risk of developing fear and psychological distress.

Methodology: This was a web-based cross-sectional survey conducted in April-May 2020 among 475 health workers directly involved in COVID-19 management in Nepal. The Fear Scale of COVID 19 (FCV-19S) was used to measure the status of fear.

Key message: Study findings highlighted that the presence of COVID-19 fear was moderately correlated with anxiety and depression, and weakly correlated with insomnia. Nurses, health workers experiencing stigma, working in affected districts, and the presence of family members with chronic diseases were significantly associated with higher odds of developing COVID-19 fear.

Prevalence and correlates of tobacco and alcohol use among adolescents in Nawalpur district, Nepal

DOI: <https://www.jcmc.com.np/jcmc/index.php/jcmc/article/view/478>

Context: World Health Organization has warned of increasing Non-Communicable Diseases (NCDs) among adolescents as a major public health problem. Tobacco use and alcohol consumption are the major behavioral risk factors of NCDs.

Methodology: This was a cross-sectional study conducted among 377 school-going adolescents in different schools of Gaindakot municipality of Nawalpur district, Nepal.

Key message: Prevalence of tobacco and alcohol consumption was found to be 11.6% and 16.3% respectively. Male (AOR = 4.8, 95% CI: 2.0-11.5), older adolescents (AOR = 3.4, 95% CI: 1.6-7.2), pocket money of more than Rs. 350 (AOR 4.7, 95% CI 1.6-13.8) and living with other than family members (AOR 3.8, 95% CI 1.7-8.5) had higher odds of tobacco consumption whereas, male (AOR = 5.4, 95% CI: 2.5-11.5), late adolescents (AOR = 2.6, 95% CI: 1.3-5.0), pocket money of more than Rs. 350 (AOR = 5.4, 95% CI: 2.2-13.2) had higher odds of alcohol consumption.

Prevalence of Sleep Disturbances During COVID-19 Pandemic in a Nepalese Population: A Cross-Sectional Study

DOI: <https://doi.org/10.13078/jsm.210012>

Context: The coronavirus disease (COVID-19) pandemic is adding to the fear that leads to anger, anxiety, frustration, and stress, emotions that directly affect sleep quality.

Methodology: This was a cross-sectional study conducted among 206 Nepali residents. The Insomnia Severity Index (ISI) questionnaire was used to measure sleep disturbances before and after the COVID-19 pandemic.

Key message: The prevalence of clinical moderate insomnia has increased tremendously in Nepalese individuals. Before the pandemic's onset, only 3.9% of the participants had moderate to severe levels of clinical insomnia; after its onset, this value increased to 17.5%. The study findings suggested that people are suffering tremendously from sleep disturbances and call for further research and active measures to help increase sleep quality during the COVID-19 pandemic.

Burden of Stroke in Nepal: Findings from Global Burden of Disease Dataset 2017

DOI: <http://kumj.com.np/issue/75%20Special%20/11-17.pdf>

Context: Stroke accounts for 10% of global death, of which more than three fourth occur in low- and middle-income countries. An exact estimate of the burden of stroke in Nepal is not available.

Methodology: This study analyzed the data from the Institute of Health Metrics and Evaluation's Global Burden of Diseases 2017 on stroke deaths, disability-adjusted life years, incidence, and prevalence rates, for both genders.

Key message: This study found that stroke contributed 7.6% of total deaths and 3.5% of total DALYs in Nepal, with a higher burden among the male and old age population. Intracerebral hemorrhage was the dominant type of stroke in Nepal with the highest proportion of deaths and DALYs.

Needs Assessment of Leadership and Governance in Cardiovascular Health in Nepal

DOI: <http://kumj.com.np/issue/75%20Special%20/30-39.pdf>

Context: Good governance and leadership are essential to improve healthy life expectancy particularly in low and middle-income countries (LMICs).

Methodology: This was a qualitative study design using “The Health System Assessment Approach”. Eighteen indicators under six topical areas in leadership and governance in cardiovascular health were assessed using desk review and key informant interviews.

Key message: This study highlighted that there is a scarcity of cardiovascular disease-specific protocols and coordination has not been effective to work together with private and non-governmental sectors in health. It concluded that the government needs to designate a workforce for specific programs to help monitor the enforcement of health sector regulations, allocate enough funding to encourage CVD research, and work towards developing CVD-specific guidelines.

National Needs Assessment of Health Information System to Address Cardiovascular Diseases in Nepal: A Mixed-Method Study

DOI: <http://kumj.com.np/issue/75%20Special%20/51-57.pdf>

Context: A health information system is an integral component of a country's capacity to integrate, process, report, and use information in improving health services.

Methodology: This study adopted the United States Agency for International Development manual “The Health System Assessment Approach: A How-To Manual”, Version 2.0. A desk review and key informant interview were performed.

Key message: The study concluded that a separate section of cardiovascular diseases in the Health information system is required. Better reporting of private sectors and their inclusion in databases is of utmost importance.

Assessment of Health Service Delivery to Address Cardiovascular Diseases in Nepal

DOI: <http://kumj.com.np/issue/75%20Special%20/40-50.pdf>

Context: A comprehensive study to explore cardiovascular health service delivery in Nepal is lacking.

Methodology: This was a mixed-method study using the six building blocks of the World Health Organization health system framework. The desk reviews of national and international documents were conducted and several key informant interviews were conducted.

Key message: The study found that most of the cardiovascular services are concentrated in urban areas, and suffer from poor access, quality, utilization, and coverage in most of the areas resulting in poor health outcomes. Improved disease system including the medical recording and reporting mechanism to incorporate and reflect the true burden of CVD in Nepal is lacking. Equitable expansion of promotive, preventive, diagnostic, referral, and rehabilitative cardiovascular services are needed to ensure universal health coverage.

Status of Health Financing on Cardiovascular Diseases in Nepal -Findings from a National Needs Assessment

DOI: <http://kumj.com.np/issue/75%20Special%20/58-67.pdf>

Context: With the epidemiological transition and increasing trend of Cardiovascular diseases (CVDs), it is crucial to assess the status of health financing to address the gap of prevention, control, and treatment of CVDs in Nepal.

Methodology: This is a sequential explanatory mixed-method research design. Desk reviews were conducted, secondary data on health financing was analyzed followed by Key-Informant Interviews with five relevant policymakers and experts.

Key message: Out of pocket (OOP) expenditure remains the highest source (52%) of total health care expenditure in Nepal, and two-third of it is made for NCDs. With the rising burden of cardiovascular diseases and its impact on impoverishment due to high OOP, integrated health care services, budget specification based on the evidence-based burden of disease such as CVD needs to be prioritized by the government.

Human Resources for Cardiovascular Disease Management in Nepal: A National Need Assessment

DOI: <http://kumj.com.np/issue/75%20Special%20/3-10.pdf>

Context: The availability of trained human resources to address the exponential rise in cardiovascular disease in Nepal is a national concern.

Methodology: This was an exploratory sequential mixed-method study.

Key message: There is no clear definition and required estimation of health workers for cardiovascular disease management. This study concluded that a clear definition and estimation of health workers with stringent human resource plans for cardiovascular disease management is essential.

COVID-19 pandemic and suicides in Nepal: Way forward for prevention

DOI: <https://www.nepjol.info/index.php/NJE/article/view/41116>

Context: The impact of the COVID-19 pandemic is immeasurable as it is catastrophic in nature and involves both a human and financial loss. It is however preventable via the use of timely, evidence-based, and many times low-cost interventions and therapies.

Methodology: This was an editorial.

Key message: It is evident that COVID-19 and the lockdown had a massively negative effect on the mental health of the population in Nepal. Extra support and preventative measures need to be introduced during this difficult period and further national programs must be employed to best aid the mental health of their fellow countrymen.

A study on referral of patients in Department of Psychiatry at Lumbini Medical College and Teaching Hospital

DOI: <https://www.nepjol.info/index.php/JGMCN/article/view/36824>

Context: In a developing country like Nepal, where there is inadequate awareness but more social stigma towards psychiatric illnesses among people, there is an important role of referral psychiatry.

Methodology: This was a descriptive hospital-based study conducted among 781 patients who were referred to the psychiatry department from different outpatient departments of Lumbini Medical College and Teaching Hospital, Nepal.

Key message: The majority of patients (36.4%) were referred from the medicine department. The most common psychiatric illness diagnosed were anxiety, dissociative, stress-related, somatoform, and other Non-Psychotic Mental Disorders. The study concluded that referral psychiatry plays an important role to diagnose undiagnosed

psychiatric illnesses earlier and better and manage accordingly so it should be prioritized and practiced in health centers.

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: Most documented studies have focused on the mental health status of health care workers during the pandemic but there are very few studies, focusing on mitigation of mental health problems among nurses.

Methodology: This was a mixed-method study conducted, including 278 nurses from two COVID-19 hospitals of the province by purposive sampling.

Key message: Depression, anxiety, and stress are common issues of nurses. Common causes of problems were lack of resources, fear of being infected, and fear of transmitting to family members. The psychosocial strengthening program was effective in reducing the problems.

Knowledge, awareness, attitudes and screening practices towards breast and cervical cancer among women in Nepal: a scoping review

DOI: <https://doi.org/10.1007/s10389-021-01688-7>

Context: Breast and cervical cancers have emerged as major global health challenges and disproportionately affect women in low- and middle-income countries, including Nepal.

Methodology: This was a scoping review.

Key message: It was found that knowledge and screening practices for breast and cervical cancer among Nepali women were poor and highlight the need for awareness and education programs. The main knowledge gaps were misconceptions about symptoms and risk factors, and poor understanding of screening behaviors. Screening practices were mostly inadequate due to socio-cultural, geographical, or financial barriers. Higher levels of knowledge, (health) literacy, and participation in awareness campaigns facilitated breast cancer screening.

Posttraumatic stress disorder and its predictors in Kathmandu Valley residents after the 2015 Nepal Earthquake

DOI: <https://doi.org/10.1016/j.ijdr.2021.102733>

Context: Post-disaster surveys in many disaster-hit areas in the world indicate that the victims and affected people live a fearful life for a certain period.

Methodology: This study assessed the state of mental health of the 2015 Nepal Earthquake victims in relatively heavy-hit areas of the Kathmandu Valley. 17-item instrument was used for assessing PTSD symptoms.

Key message: The survey results indicate that there was a certain level of PTSD in the Kathmandu residents, and it can be associated not only with house damage and fatal loss but also the house repair work and livelihood revival. So, it is considered that delays in recovery and reconstruction may also lead to the prevalence of PTSD.

Prevalence of Depression among Lesbian, Gay, Bisexual, Transgender, and Queer in Pokhara, Nepal

DOI: <https://journals.onehealth.edu.np/index.php/home/article/view/5>

Context: Depression is a common and serious medical illness among all but the rate of getting depression is higher in LGBTQ than heterosexuals leading to a variety of problems that affect both physically and emotionally.

Methodology: This was a descriptive cross-sectional study done in an organization (Paribartan Nepal), Pokhara. Snowball sampling was used to recruit 54 samples who were either registered in the organization or referred by it. Hamilton Depression Rating Scale was used to assess depression.

Key message: About one-third of the LGBTQ respondents were found to be depressed among which transgender (31.6%) were highly depressed comparatively.

Let's unite to beat NCDs.

#actonNCDs #beatNCDs

For further queries or suggestions: please reach us at ncdwatchnepal@gmail.com