



**NCD Watch Nepal**

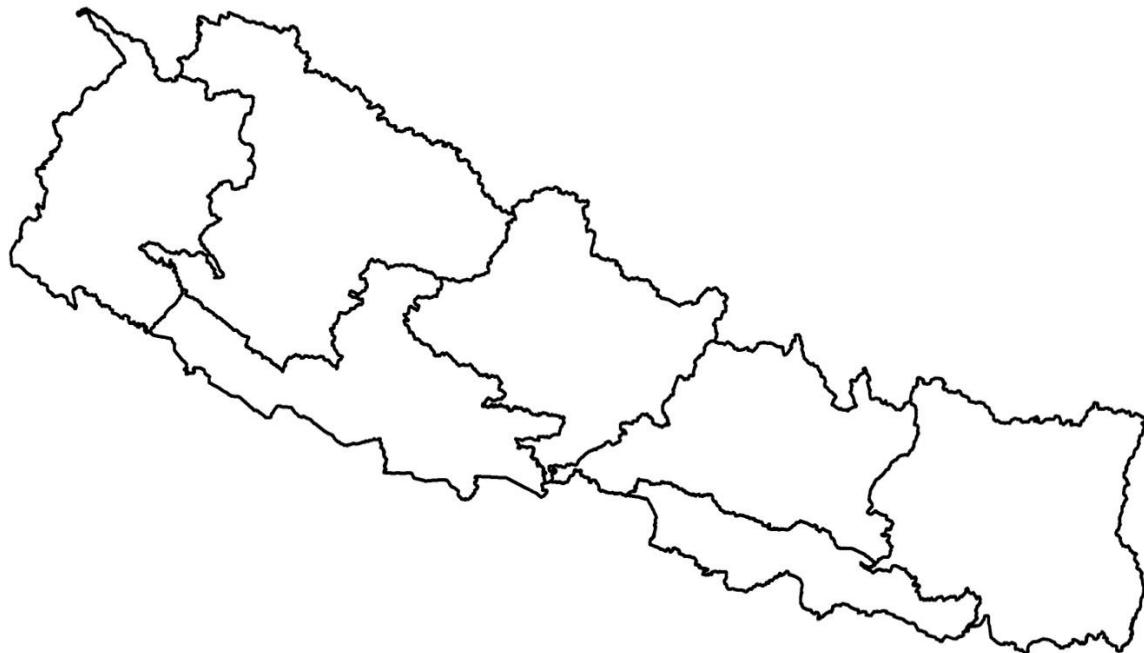
## Non-communicable Diseases in Nepal

**Research Roundup August 2022**

*Making non-communicable diseases a national priority*

# **Non-communicable Diseases in Nepal-Research Roundup**

**August 2022**



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## Roundup Summary

For the month of August 2022, our scoping on non-communicable diseases in Nepal found 13 published articles. The majority of the studies were cross-sectional studies and, covering the topic of mental health, hypertension, diabetes, cancer, and cardiovascular disease.

### Knowledge, attitude and practice regarding diabetes and hypertension among school students of Nepal: A rural vs. urban study

**DOI:** <https://doi.org/10.1371/journal.pone.0270186>

**Context:** Good knowledge of non-communicable diseases among young people will make them adopt a healthy lifestyle from an early age, which will, in turn, prevent them from developing such diseases.

**Methodology:** This was a cross-sectional study conducted in four schools in Nepal (1 from a metropolitan city, 2 from an urban municipality, and 1 from a rural municipality) among 380 secondary-level students of classes 9 and 10 in each school.

**Key message:** It was found that respondents from the metropolitan city had significantly higher mean knowledge scores than the respondents from the urban and rural municipality ( $p<0.001$ ). Similarly, participants from rural municipality had significantly higher daily consumption of fruits and vegetables. Place of residence, family occupation, parental education, and family history of diabetes and hypertension were significantly associated with good knowledge level.

### Need for HTA supported risk factor screening for hypertension and diabetes in Nepal: A systematic scoping review

**DOI:** <https://doi.org/10.3389/fcvm.2022.898225>

**Context:** Even though the Package for Essential Non-communicable Diseases (PEN) has already been initiated, there is a clear policy gap in the Health Technology Assessment (HTA) of any health device, service, or procedure, including the assessment of cardiovascular risk factors (CVRFs) in Nepal.

**Methodology:** This is a systematic scoping review. A total of 53 articles and reports were included for the review.

**Key message:** Overall, the prevalence of diabetes (4.4 - 18.8%) and hypertension (17.2 - 70.0%) was reported in most studies. This study recommends a national policy for establishing an HTA agency and some immediately implementable actions.

## **Mechanisms of action for stigma reduction among primary care providers following social contact with service users and aspirational figures in Nepal: an explanatory qualitative design**

**DOI:** <https://doi.org/10.1186/s13033-022-00546-7>

**Context:** There is a gap in understanding how stigma reduction initiatives for primary care providers (PCPs) produce changes in attitudes and clinical practices.

**Methodology:** This is a pilot randomized controlled trial of a stigma reduction intervention in Nepal: REducing Stigma among HealthcAre Providers (RESHAPE). RESHAPE was compared to a standard mental health Gap Action Program (mhGAP) training. Qualitative interviews were conducted with PCPs five months post-training

**Key message:** PCPs in both training arms described changes in knowledge, skills, and confidence in providing mental healthcare. Importantly, PCPs in the RESHAPE arm were more likely to describe a willingness to treat mental health patients and attributed this in part to social contact with service users during the training.

## **A Scoping Review on the Status of Female Breast Cancer in Asia with a Special Focus on Nepal**

**DOI:** <https://doi.org/10.2147/bctt.s366530>

**Context:** Breast cancer (BC) is the most commonly diagnosed malignancy and the foremost cause of death among females.

**Methodology:** This is a scoping review including 90 published articles.

**Key message:** This study showed that the number of cases of breast cancer is growing all around the world, including in Asia and Nepal. Age, early menarche, late menopause, nulliparity, positive family history, excessive fat consumption, alcohol, and smoking are all frequent risk factors for breast cancer found in Asian women. Breast self-examination, clinical breast examination, and mammography screening were the common methods for detecting breast carcinoma. Also, chemotherapy, radiation, and modified mastectomy were commonly used options for treatment.

## **Correlation of Biochemical Parameters among Diabetes patients attending Medicine OPD of Janaki Medical College Teaching Hospital**

**DOI:** <https://www.nepjol.info/index.php/JMCJMS/article/view/47852>

**Context:** With an increasing incidence of diabetes mellitus, the cardiovascular and renal complications associated with it are emerging as a major concern.

**Methodology:** This was a hospital-based cross-sectional study conducted among 249 confirmed type 2 diabetic patients attending medicine OPD of Janaki medical college teaching hospital (JMCTH), Dhanusha, Nepal.

**Key message:** This study found a significant difference in blood sugar and lipid profiles among male and female diabetic patients. Similarly, correlation was seen between blood sugar and lipid profile; uric acid and lipid profile as well as creatinine and sodium.

### **School-based group interpersonal therapy for adolescents with depression in rural Nepal: a mixed methods study exploring feasibility, acceptability, and cost**

**DOI:** <https://doi.org/10.1017/gmh.2022.46>

**Context:** Depression is a common mental disorder which accounts for 11% of total years lived with disability among adolescents aged 15–19 and 7% among adolescents aged 10–14.

**Methodology:** This was a mixed-methods, uncontrolled pre-post evaluation to explore the feasibility of Interpersonal therapy (IPT) and inform decisions to progress to an RCT. 32 boys and 30 girls (aged 13–19) who screened positive for depression were the study participants.

**Key message:** Depression Self-Rating Scale (DSRS) score decreased by 81% (95% confidence interval 70–95); functional impairment decreased by 288% (249–351). This study concluded School-based group IPT is feasible and acceptable in Nepal.

### **Assessment of Self-care practices, Treatment satisfaction and Quality of Life among Diabetes Type2 Patients in Pokhara, Nepal**

**DOI:** <https://www.nepjol.info/index.php/mjmms/article/view/47751>

**Context:** Treatment satisfaction and health-related quality of life are related and important for successful treatment of diabetes patients.

**Methodology:** A cross-sectional study was conducted among 248 diabetes type-2 patients from June 2019 to December 2019 in Pokhara Metropolitan City, Nepal. Diabetes-39 questionnaire was used to assess the quality of life of the participants.

**Key message:** A total of 41.9% of the participants were engaged in physical activity and 39.9% had tested blood sugar monthly. Similarly, 68.5% of the participants had good quality of life and 98.0% were satisfied with the treatment. Factors such as age, sex, marital status, physical activity and duration of diabetes mellitus were associated with quality of life.

### **Academic Burnout among Students studying in Selected Secondary School of Chitwan**

**DOI:** <https://www.nepjol.info/index.php/mjmms/article/view/47658>

**Context:** Today's students are facing dual stress in their academic endeavor i.e., higher academic expectations and perceived pressure from their parents.

**Methodology:** A cross-sectional study was done among a total of 230 secondary level students in a school of Bharatpur municipality, Nepal.

**Key message:** Among the participants, 62.2% and 7.4% students had mild and moderate burnout respectively. Significant difference in the median personal burn out and instructor related burnout level among male and female students.

### **Psychological Impact among Frontline Police Personnel of Kathmandu Metropolitan City in Nepal: A cross-sectional Study**

**DOI:** <https://www.ajhs.org.np/ajhs/index.php/ajhs/article/view/78>

**Context:** Due to their sensitive exposures and nature of work, police officers have grown more prone to depression, anxiety, and stress.

**Methodology:** A cross-sectional study was conducted among 373 randomly sampled frontline police personnel of Kathmandu Metropolitan City. A self-administered DASS questionnaire was used to assess the psychological impact.

**Key message:** The prevalence of depression, anxiety, and stress was found to be 67.8%, 73.5%, and 23% respectively. This study highlighted the importance of adequate psychological assistance to police officers as it is physically, emotionally, and intellectually demanding profession.

### **Effectiveness of Yoga-based Interventions on Chronic Low Back Pain (CLBP) – A Review of Randomized Controlled Trials**

**DOI:** <https://www.nepjol.info/index.php/ohjn/article/view/47432>

**Context:** The global incidence of LBP is increasing and studies have reported that the yoga-based interventions are effective for patients with LBP.

**Methodology:** This was a review of randomized controlled trials

**Key message:** Yoga appeared to be more effective than physical exercise in patients with CLBP. This study suggested that the government and public hospitals should take actions to employ the ancient science of yoga to cure patients with CLBP to avoid side effects and complications.

### **Prevalence of Anxiety and Depression among College Students in Kathmandu, Nepal**

**DOI:** <https://www.nepjol.info/index.php/ohjn/article/view/47450>

**Context:** Many college students experience several mental health issues because of academic pressure, family expectations, difficult environment, and controlling people.

**Methodology:** This was a cross-sectional study conducted in 504 students of grade 11 and 12 studying in nine randomly selected colleges of Kathmandu valley, Nepal. Hospital Anxiety and Depression Scale (HADS) was used to assess the status of anxiety and depression.

**Key message:** The prevalence of anxiety and depression among college students was found to be 53.97% and 39.88% respectively. This study suggested the Government of Nepal and other concerned bodies to pay attention to this area.

### **Prevalence of Risk Factors of Cardiovascular Diseases among Government Employees of Hetauda Sub-Metropolitan City**

**DOI:** <https://www.nepjol.info/index.php/ohjn/article/view/47449>

**Context:** Government employees might be at high risk of developing risk factors of non-communicable diseases.

**Methodology:** A cross-sectional descriptive study was conducted among 393 government employees of Hetauda sub metropolitan city. WHO STEPS survey questionnaire was used to assess the risk factors of cardiovascular diseases among the participants.

**Key message:** This study found that almost every government employee was found to have one or more established risk factors of CVDs. The prevalence of current smokers was 16.3%, 72.9% consumed alcohol in the past 30 days, and 67.2% never practiced any physical activity. The self-reported diabetes was found among 11.7% of participants whereas 19.4% had hypertension.

### **Depression among Elderly Residing in Old-age Homes in Devghat, Nepal**

**DOI:** <https://www.nepjol.info/index.php/njhs/article/view/47161>

**Context:** Depression among the elderly is a common phenomenon that is increasing at an alarming rate in recent years.

**Methodology:** A cross-sectional analytical study conducted among 155 elderly residing in old-age homes of Devghat town in Tanahun district of Nepal. Geriatric Depression Scale-15 was used to assess depression.

**Key message:** Among the participants, 45.8% had mild depression followed by 36.8% who had moderate depression. A statistically significant association was found between the level of depression and marital status, educational status, asthma, and habit of smoking. Provision of regular screening and adequate support and initiatives from concerned authorities to uplift the mental status of these elderly people is needed.

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 August 2022.

Should you have colleagues who'd like to receive these updates via email  
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