



NEPAL HEALTH RESEARCH COUNCIL



ANNUAL REPORT

Fiscal Year 2080/81(2023/2024)

NEPAL HEALTH RESEARCH COUNCIL

ANNUAL REPORT FY 2080/81 (2023/2024)

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Message

The primary focus of Ministry of Health and Population (MOHP) is to convey paramount quality of healthcare to all citizens of Nepal. The MOHP is working towards achieving "Universal Health Coverage". In a year marked by significant changes and unforeseen circumstances, our commitment to serving the public remained steadfast. We focused on enhancing the quality of life for all citizens through innovative policies, sustainable practices, and collaborative efforts with various stakeholders.

Over the past year, Nepal Health Research Council (NHRC) have significantly advanced the field of health research in Nepal, addressing the pressing health challenges faced by our communities by generating evidences through research. As in the previous year, I am glad to know that the Nepal Health Research Council is bringing out the Annual Report for fiscal year २०८०/८१. This annual report portrays the annual performance of the health research activities conducted, aiming to promulgate information on key tasks.

I expect this annual report will be a valuable resource for policy makers, program manager, and all relevant stakeholders involved in the health sector. I further want to express my gratitude to NHRC for their unwavering commitment to advancing health research in Nepal, which is crucial for addressing diverse health challenges in Nepal. Together we can build healthier future through continued efforts in promoting health research in Nepal that drives innovation and leads to transformative change in health system.

Pradip Paudel

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PREFACE

It is a great privilege to present the annual report of Nepal Health Research Council (NHRC) for the year 2080/81. Health research is one of the priorities of the Ministry of Health and Population. We are truly delighted to witness the remarkable changes in health research in Nepal largely driven by the dedicated efforts of the Nepal Health Research Council. Their commitment towards fostering innovation and supporting researchers has been instrumental in advancing health research, translating into impactful policies and improve health outcomes of the community.

In a rapidly progressing health landscape, the role of robust research cannot be overstated. The ongoing impact of the global health crisis and need for sustainable health outcomes, highlights the importance of continued investment in health research. This annual report has presented the information related to research activities with wider coverage of pressing health issues from infectious diseases to non-communicable diseases, adolescent's health to geriatric health and medical research to Ayurveda. The valuable insights gained from these researches has strengthened our commitment towards evidence-based policymaking. This report not only highlights achievements but also outlines future directions and serves as a vital reflection of our collective efforts, achievements, and challenges in advancing health research across the country. We are confident that this report will shed the light and provide insightful information to prioritize existing health plans and policies.

We believe that this annual report will help policymakers, researchers and stakeholders working in health sector to better comprehend the situation of health research in the country and contribute towards achieving health and wellbeing of Nepalese people. We would like to affirm that the Ministry of Health and Population is committed to translating the available quality evidence into policy and actions for the advancement of health outcomes in Nepal.

.....
Dr. Roshan Pokhrel
Secretary

PREFACE

It is with great pleasure that we present the Annual Report of the Nepal Health Research Council (NHRC) for the fiscal year 2080/81 (2023/2024). This report offers a detailed account of the research activities undertaken by the NHRC and its partners, highlighting significant achievements and progress made during this period. As Nepal's apex body for health research, the NHRC is dedicated to generating evidence, regulating research, building research capacity, and advocating for integrating research findings into policy and planning.

This report reflects our unwavering commitment to these objectives and showcases the breadth and depth of research conducted, spanning critical areas such as communicable and non-communicable diseases, maternal and child health, nutrition, environmental and occupational health, Health education and information, and Mental Health. Each research project meticulously explores pressing health challenges in Nepal, to generate robust data that can inform effective interventions and policies.

The NHRC remains steadfast in its mission to foster a vibrant research culture in Nepal. This report underscores our commitment to capacity building through training programs, workshops, and the dissemination of research findings. We strive to empower researchers with the necessary skills and knowledge to conduct high-quality research that addresses national health priorities.

Collaboration lies at the heart of our work. This report acknowledges the invaluable contributions of our dedicated staff, esteemed Executive Committee members, and our valued partners, including the Ministry of Health and Population, national and international organizations, research institutions, and individual researchers. We are immensely grateful for their unwavering support and collaboration, which are instrumental in advancing health research in Nepal.

The information presented in this report will be a valuable resource for policymakers, researchers, and stakeholders working to improve the health and well-being of the Nepalese people. We are confident that the insights gleaned from this report will guide our future endeavors and propel us toward achieving our vision of a healthier Nepal.



Prof. Dr. Gehanath Baral

Chairman

Nepal Health Research Council

ACKNOWLEDGMENT

Nepal Health Research Council is an autonomous and apex body of Government of Nepal to promote and coordinate high quality health research in Nepal. NHRC was established in 1991 by an Act of Parliament and is responsible for promoting and coordinating health research to improve the health status of the people. NHRC aims to create a conducive environment for health research and help researchers and research institutions in enhancing their research capacity.

NHRC is mainly responsible for evidence generation, research regulation, capacity building and promoting use of evidence in policy and planning in Nepal.

It is my great privilege to bring out the annual report of the NHRC for the fiscal year 2080/81 (2023/2024). This report reflects the activities implemented within the last fiscal year and also highlights the achievements that have been accomplished so far. It aims to share information about the research activities, activities carried out to promote health research and improve utilization of the research findings for the development of health policy of Nepal. I am grateful to Executive Committee of NHRC for their policy and strategic direction for implementation of research activities.

I would like to express my sincere gratitude to Mr. Subodh Kumar Karna, Chief of the Finance Administration Section; Dr. Meghnath Dhimal, Chief of the Research Section; Mr. Saraswati Prasad Bhattarai, Store/Administrative Officer, Ms. Namita Ghimire, Research Officer, Ethical Review, Monitoring, and Evaluation Section; Mr. Chandra Bhushan Yadav, Library & Information Officer; Mr. Pradeep Belbase, Training Assistant and Mr. Sudip Paudel, Capacity Building Section, and Mr. Subash Ghising, Admin Assistant for their contribution to accomplish the activities planned in the fiscal year 2080/81. I am also thankful to Dr. Bishnu Prasad Marasini, Senior Research Associate, Ms. Babita Bhatta, Admin Associate; and Ms. Elina Khatri, Ms. Rajina Shakya, Ms. Upama Ghimire, Ms. Kusum Shahi and Ms. Sunita Baral, Research Associates, for providing the data and information for this report.

I am also deeply thankful to Ms. Sailaja Ghimire, Research Associate, and Bishal Dahal Khatri, Research Assistant for their dedicated efforts in compiling and preparing this annual report.



Dr. Pramod Joshi

Member Secretary - Executive Chief

Nepal Health Research Council

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ACRONYM

Abbreviations	Full Forms
AAR	Age-Adjusted Incidence Rate
CBS	Central Bureau of Statistics
CKD	Chronic Kidney Disease
CLIMB	The Impact of Rapid Climate Change on The Biodiversity Health Interface
CUP	Cancers with Unknown Primary
DAC	Development Assistance Committee
DM	Diabetes Mellitus
ERB	Ethical Review Board
FA5	Framework Agreement Five
FACE UP	Factors Affecting Childhood Exposure to Urban Particulates
FCHVs	Female Community Health Volunteers
FERCAP	Forum for Ethical Review Committees in The Asian and Western Pacific Region
GGPD	Glucose-6-Phosphate Dehydrogenase
GYTS	Global Youth Tobacco Survey
HRT	Hormone Replacement Therapy
IARC	International Agency for Research on Cancer
INGOs	International Non-Governmental Organizations
IRCs	Institutional Review Committees
ITM	Institute of Tropical Medicine
MESH	Medical Subject Heading
MIR	Mortality-to-Incidence Ratio
MoHP	Ministry of Health and Population
MV	Microscopic Verification
NCDs	Non-Communicable Diseases
NGOs	Non-Governmental Organizations
NHEICC	National Health Education, Information, and Communication Centre
NHRC	Nepal Health Research Council
OCPs	Oral Contraceptive Pills
ODK	Open Data Kit
OR	Odds Ratio
PAP	Particulate Air Pollution
PBCR	Population-Based Cancer Registry
PHMRC	Population Health Metrics Research Consortium
RNA	Ribonucleic Acid
SCD	Sickle-Cell Disease
SMS	Short Message Service
SMS	Short Message Service
UNICEF	United Nations Children's Fund
VA	Verbal Autopsy
VBDs	Vector Borne Diseases
WHO	World Health Organization
WP	Work Packages

EXECUTIVE SUMMARY

Nepal Health Research Council (NHRC) is the apex body to promote health research nationwide. It was established under the NHRC Act 2047 (1991) with the aim of conducting, promoting, and coordinating for the betterment of the health status of Nepalese People. NHRC is publishing annual report each year since its establishment with the main aim of compiling all the activities carried out in NHRC in a systematic order and to disseminate information about the activities. This annual report includes an introduction of NHRC that has five chapters namely: Administration, Health Research, Ethical Review, Library, and Information and Publication.

The administration section is responsible for performing daily operations, overseeing staff, and maintaining records. This year NHRC has conducted nine board meeting and signed three Memorandum of Understanding. NHRC represented in several national and international workshops, seminars, meetings, and forums. Moreover, NHRC receives regular annual budget from the Government of Nepal since 2000 AD along with receiving budget from various national and international organizations.

The research section of NHRC is responsible for conducting various research projects. In this fiscal year, NHRC conducted all together ten research projects, of which seven are completed and others are ongoing.

Among the various objectives of NHRC, promoting responsible conduct of health research and regulation of all health-related research conducted in Nepal is one. To oversee the responsible conduct of research in Nepal, NHRC has published National Ethical Guidelines for Health Research and have formed Institutional Review Committees. This year Ethical Review Monitoring and Evaluation Section registered a total of 678 protocols of which 550 were approved. This year in total 73 Ethical Review Board Meeting were conducted. Furthermore, they conducted 12 monitoring visits, two training workshops and one research project connected to ethics.

NHRC established library section with the main aim to provide research-based health information for all health professionals involved in research activities serving as a repository for health-related information and resources. Furthermore, NHRC library has established a network with other health research libraries and can access HINARI program set up by the WHO. Till now NHRC library can provide information of 11,400 journals (in 30 different languages), and 18,500 e-books for more than 100 countries. This year NHRC library has developed web-based NEPMED health journal repository, purchased books for NHRC user, and provided scientific indexed health journals information. In addition, capacity building section is responsible for conducting research and publishing NHRC journal. This year, we published six issues and have conducted seven trainings of which three were related to the health research proposal development, and four were related to data management and analysis.

INTRODUCTION

Background

Nepal Health Research Council (NHRC) is the national apical body established to promote health research nationwide. NHRC was established under the Nepal Health Research Council Act 2047 (1991), of the Nepal Government in 1991 and is responsible for health research conduction, promotion and coordination for the betterment of the health status of Nepalese people.

The major focus areas of NHRC have been research regulation, evidence generation including translation into policy and practice, and research capacity building. It is the national organization responsible for the technical and ethical review of proposals submitted by individual health researchers, national authorities, research institutions, non-governmental organizations (NGOs), international non-governmental organizations (INGOs), and universities. After appropriate review, these proposals are approved by the Ethical Review Board (ERB) of NHRC. In its role of generating evidence, it carries out research on its own on national priorities and has a major focus on national representative studies. Finally, in its role of research capacity building, it provides training on various aspects of health system research methodology to aspiring researchers to develop a critical mass of people who can develop good quality research proposals. NHRC aims to maintain high levels of technical and ethical standards of research carried out in Nepal.

NHRC has been providing health research grants to researchers to promote research culture throughout the country. It also conducts research training, workshops, and dissemination programs in development regions to promote research activities and the generation of evidence. NHRC also facilitates access to research findings from different research reports, journals, books, magazines, etc. through the library and digital database.

Objectives of NHRC

1. To do or cause to do study and research on health problems and issues being encountered or likely to be encountered in future.
2. To conduct programs relating to consultancy services and information to make the study and activities relating to health research more useful.
3. To acquire global and national level evidence on health related problems, and inform the government of Nepal for evidence-based policy making and planning.

Organization Structure of NHRC

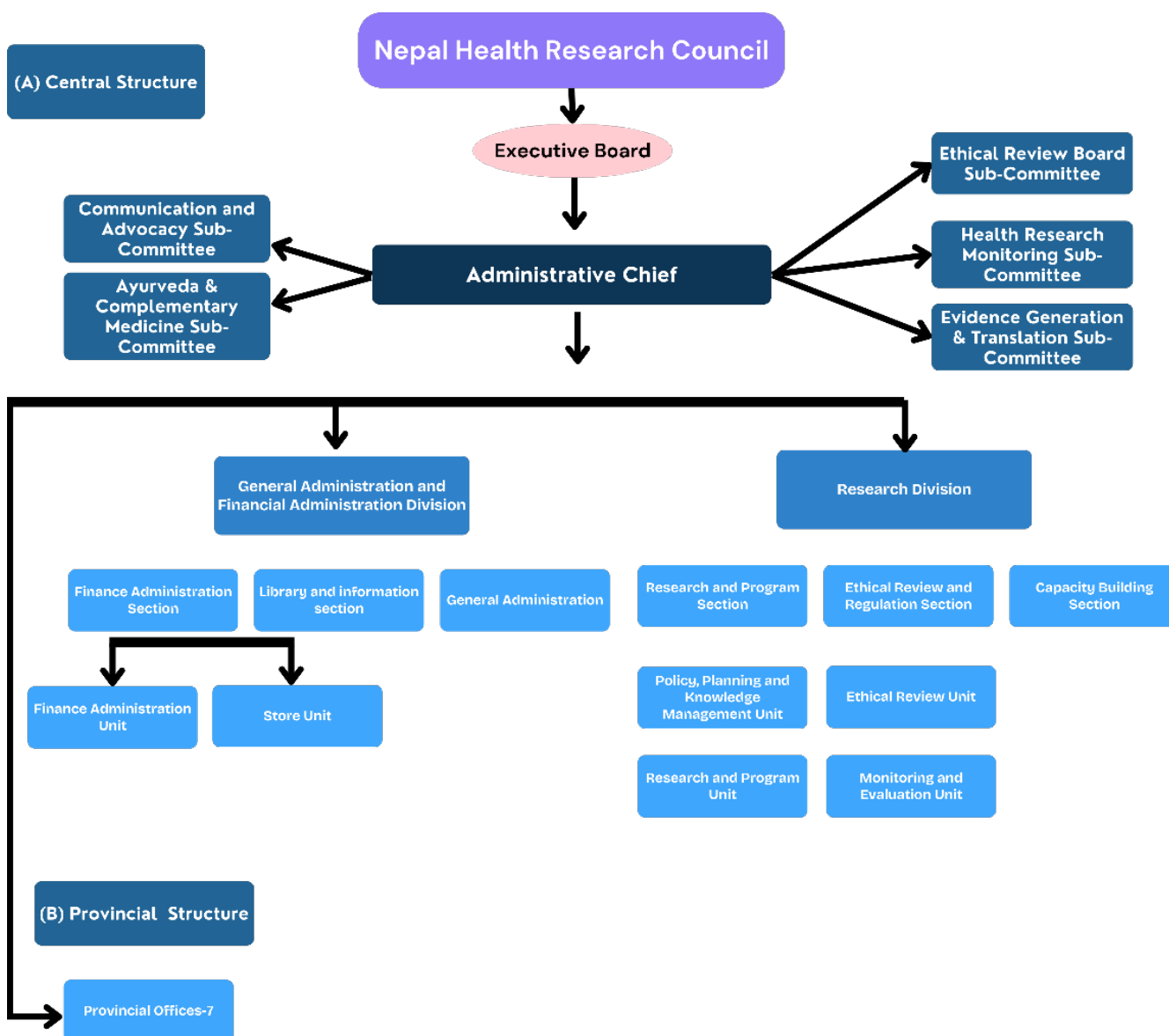


Figure 1 Organization Structure of NHRC

Roles/ Duties and Function of NHRC

- Subject to the health policy of the Government of Nepal, to do, or cause to be done, study and research works on health within Nepal.
- To formulate policies on both basic and applied study and research works on health.
- To do research on health system, biomedical health service, food, behaviour and decency and do, or cause to be done, study on prevention, diagnosis, treatment of diseases and ailments.
- To specify priority sectors of study and research relating to health.
- To give consent for study and research works on health, fix priority and make recommendation to the Government of Nepal.
- To coordinate, guide and assess research works on health and render necessary advice.

- To publish and publicize health related knowledge, experience and outputs of research and exchange information at the national and international levels.
- To do research works on health within Nepal, and where a research work is to be done in an area where facility is not available, to give approval to undertake some part of research abroad.
- To provide prize, scholarships and travel allowance as required to a person or organization who does research on health.
- To maintain records of health related research works.

Objective of the NHRC Annual Report

The main objective of publishing the NHRC annual report for this fiscal year 2080/81 is to compile all the activities carried out in NHRC in a systematic order and to disseminate information about the activities to Government of Nepal and other stakeholders. Nepal Health Research Council's Act, 1991 Section 17 states that the Council shall have to submit an annual report of its activities to the Government of Nepal at the end of every fiscal year which is the main motive for the publication of this annual report.

CHAPTER 1: ADMINISTRATION SECTION

The administration section of NHRC is responsible for performing daily operations, overseeing staff, and maintaining records. There is a general and personal administration unit under the administration unit under administration section of NHRC.

Activities of NHRC Administration Section for the Fiscal Year 2080/81

NHRC has conducted nine board meetings within this period.

Table 1 Executive Board Meeting

S.N.	Number of Meeting	Date
1	210 th Executive Board Meeting	01/05/2080
2	211 th Executive Board Meeting	05/05/2080
3	212 th Executive Board Meeting	21/06/2080
4	213 th Executive Board Meeting	08/08/2080
5	214 th Executive Board Meeting	03/09/2080
6	215 th Executive Board Meeting	03/10/2080
7	216 th Executive Board Meeting	17/10/2080
8	217 th Executive Board Meeting	23/12/2080
9	218 th Executive Board Meeting	26/03/2081

Memorandum of Understanding (MOU)

Nepal Health Research Council (NHRC) conducted MoU with different institutions as follows:

Table 2 Memorandum of Understanding

S.N.	Details	Date
1	NHRC and Karnali Health Science Academy	08/05/2080
2	NHRC and Tilganaga Institute of Ophthalmology	08/05/2080
3	NHRC and Sustainable Development Nepal	16/06/2080

Recruitment of Human Resources

On 16th August 2023, Mr. Bikram Prasad Pandey, under-secretary, internal administration section of the Ministry of Health and Population, was nominated as a MoHP representative to represent the recruitment committee. The 211th Executive Board Member meeting decided to appoint twenty-eight staffs on various post and levels on contract basis to carry

out regular activities of the council. Based on bylaws of NHRC 2079, a letter was sent to Public Service Commission for demanding vacancy of 70 human resources in various post on 11th December 2023. A subcommittee was formulated for the preparation of the required syllabus and other exam preparations on 3rd January 2024. Later, Mr. Bhakta Raj Joshi, under-secretary, MOHP was nominated as the MoHP representative to represent the recruitment committee on 2nd July 2024. The recruitment committee approved guidelines for the recruitment of contract staffs for accomplishing the research projected approved in fiscal year 2081/82.

NHRC Representation in National and International Programs

NHRC represented in various national and international programs related to health, health research and research and policy. NHRC Executive Board Members, Ethical Review Board members as well as NHRC staff participated in national and international workshops, seminars, meetings, and forums. [Annex 1]

Funding Partners of NHRC

NHRC has been receiving a regular annual budget since 2000 AD from the Government of Nepal. The Government of Nepal's fiscal year budget starts from Shrawan (July 16) and ends at Ashad (July 15). In the fiscal year 2080/81, NHRC has received a total of NRs. 190, 670, 000.00 for various projects such as Research uptake, Sickle cell anemia, Non-communicable diseases (NCDs), etc. from the Government of Nepal.

Additionally, NHRC receives a budget from different partners for the conduction of research. For instance, NHRC has received a budget from the United Nations Children's Fund (UNICEF) Nepal, to conduct research on medical oxygen supply and its use, and NCDs among children; WFP Nepal for conducting research on nutrition in Nepal and Centers for Disease Control and Prevention (CDC) has provided funds to research on COVID-19 vaccination. Also, the Institute of Tropical Medicine (ITM) Belgium has provided funds to conduct different research and training activities on climate change and vector borne diseases (VBDs). Similarly, NHRC received funds for conducting research on air pollution and children health from the Durham University, UK.

CHAPTER 2: HEALTH RESEARCH SECTION

The research section of Nepal Health Research Council is responsible for conducting various research projects including research planning, management, and dissemination of the research findings.

Table 3 Research Projects of the Fiscal Year 2080/81

S.N.	Name of the projects	Project Status
1	Understanding the Availability and Utilization of Oxygen and its Supply System with a Focus on Newborns and Pediatric Oxygen Delivery Equipment at Various Levels of Health Facilities in Nepal: A Mixed Method Study	Completed
2	Utilization of Health Education Materials on Family Planning, Safe Motherhood, and Newborn Care in Nepal	Completed
3	Prevalence of Selected Non-Communicable Diseases among Children and Adolescents in Nepal: A Cross-Sectional Pilot Study	Ongoing
4	Baseline Study on Rice Fortification Programme in Nepal	Completed
5	Factors Affecting Childhood Exposures to Urban Particulates in Nepal (FACE-UP)	Ongoing
6	Identifying the Cause of Death using Verbal Autopsy in Municipalities of Nepal	Completed
7	Study on Hemoglobinopathies and G6PD Deficiency in Terai Districts of Nepal	Completed
8	Population Based Cancer Registry	Completed
9	Framework Agreement Five (FA5) and The Impact of Rapid Climate Change on the Biodiversity Health Interface (CLIMB)	Ongoing
10	Risk Factors of Breast Cancer in Nepal: A Case-Control Study	Completed

RESEARCH PROJECT 1: UNDERSTANDING THE AVAILABILITY AND UTILIZATION OF OXYGEN AND ITS SUPPLY SYSTEM WITH A FOCUS ON NEWBORNS AND PEDIATRIC OXYGEN DELIVERY EQUIPMENT AT VARIOUS LEVELS OF HEALTH FACILITIES IN NEPAL: A MIXED METHOD STUDY

Hypoxemia can result from various medical conditions, including pneumonia, other respiratory ailments, and a wide range of circumstances such as sepsis, meningitis, trauma, and complications arising from premature birth. Enhancing the availability of oxygen therapy for children in hospital settings holds the potential to reduce inpatient childhood mortality by 10-20% and decrease pneumonia-related mortality by 20-40%. The global pandemic highlighted the urgent need for improved healthcare facilities, leading the Government of Nepal and Ministry of Health and Population (MOHP) to initiate the establishment of medical oxygen plants in public and private sector. This initiative aims to ensure convenient access to oxygen supply and enhance healthcare services in Nepal. This study is intended to explore the availability and functional status and utilization of oxygen supply systems to plan their oxygen supply system, from the oxygen source to the patient delivery device. with a focus on newborn and pediatric oxygen care in different levels of hospitals across Nepal.

A parallel convergent mixed-method study design was used to conduct this study across the seven provinces of the country. Biomedical engineers, Healthcare professionals Hospital administrators/Medical superintendents/Directors including the Parents/guardians/legal guardians of the newborn/pediatric patients who are taking care of their children during their hospital stay were included in the study.

The availability and functionality of oxygen supply are particularly insufficient in rural hospitals in Nepal. The health care professionals reveal challenges in service delivery despite the established oxygen supply systems across major hospitals, both governmental and private. Maintenance and functionality remain problematic areas. Inadequate human resources, particularly skilled biomedical technicians and engineers, pose a significant challenge. Moreover, a lack of training among healthcare personnel in operating oxygen supply systems was identified as the most significant challenge expressed by the participants. Financially, the absence of clear budget allocations for maintenance and procurement lead to delays and affected functionality. There is also a deficiency in formal information systems for biomedical management and oxygen supply recording protocols. Hospital administrators and biomedical personnel played vital roles in managing the oxygen supply system.

The central and provincial governments play the most crucial role in terms of leadership and their efforts to address the shortcomings and strengthen health system domains are pertinent. To enhance oxygen supply system maintenance and functionality, prioritizing the recruitment and training of skilled biomedical personnel is crucial. Clear budget allocations should be established for transparency and timely procurement. Implementing formal information systems can aid in effective monitoring. Collaboration among

hospital administrators, biomedical staff, and provincial governments is vital to address shortcomings. These efforts will bolster system resilience and efficiency, ultimately improving healthcare delivery and patient outcomes.

Quality improvement initiatives prioritizing oxygen therapy in government hospitals should focus on site-specific aspects of oxygen supply and delivery, identifying the reasons for the oxygen plant's operational issues, and ensuring cost-effective management to run the oxygen plant. Further research should emphasize quality improvement projects, such as providing training to healthcare professionals and technicians for delivering oxygen therapy and managing oxygen plants.

RESEARCH PROJECT 2: UTILIZATION OF HEALTH EDUCATION MATERIALS ON FAMILY PLANNING, SAFE MOTHERHOOD, AND NEWBORN CARE IN NEPAL

Health education materials in printed formats, such as pamphlets, brochures, leaflets, and flipcharts, are widely used to disseminate information on health topics like family planning, safe motherhood, and newborn care and are effective in delivering clear messages, beneficial for audiences with lower educational levels as well as culturally sensitive issues. They are cost-effective and reach a wide audience, playing a crucial role in clinical settings to reinforce verbal information from healthcare professionals and enhance patient retention. In Nepal, the National Health Education, Information, and Communication Centre (NHEICC) employs various approaches to promote health behaviors across family planning and safe motherhood and newborn care. Despite their effectiveness, addressing individual health needs remains a challenge, requiring further innovation in their design and distribution strategies. Thus, this study aimed to explore the utilization of printed health education materials in Nepal, identifying existing gaps and generating innovative ideas for developing new health education materials.

A qualitative study was carried out from Chaitra 2080 to Ashad 2081 at three local levels covering three ecological regions in Nepal: Bhimeshwor Municipality in the Mountain region, Makawanpurgadi Rural Municipality in the Hilly region, and Barahathawa Municipality in the Terai region. The study included in-depth interviews, key informant interviews, and focus group discussions. Convenience sampling was used to select the local levels and respective provinces and districts were selected for the study. Data collection tools were developed based on extensive literature reviews and study objectives. Thematic analysis was performed on translated transcriptions by identifying key themes and codes.

Participants revealed that health education materials were supplied by the NHEICC to district health offices which would then send them to local levels, and local levels would provide these materials to the health facilities. However, the distribution approaches varied because the needed materials could be obtained directly through higher levels than the actual distribution channel. Similarly, the distribution of health education materials was found insufficient, with most participants noting a shortage of printed materials at district

levels causing scarcity of materials at local levels, health facilities, Female Community Health Volunteers (FCHVs), and target groups.

However, participants expressed available materials were effectively used during counseling sessions and mother's group meetings, aiding in understanding and decision-making processes. However, most participants identified the lack of sufficient health education materials as the primary challenge. Some officials noted the decreased interest of health workers and clients in using printed materials, favoring digital tools as an alternative method. Also, participants indicated that inadequate communication, budgetary constraints, and mismanagement and misuse of materials severely hampered the availability and utilization of health education materials. Furthermore, insufficient budget allocation and misallocation of funds exacerbated these challenges, as reported by several participants.

Most of the interviewed clients and mother group members in focus group discussions stated the vital role of health education materials in receiving crucial health messages, noting their significant impact on changing behavior.

Most participants appreciated the content presented in simple language. However, there was a consensus on the need for regular updates of the materials to align with changed national protocols and new scientific findings. Concerns were also raised regarding the need to include local language and suggestions were made to increase font sizes to improve visibility and readability. Additionally, participants expressed the need for improved design, larger posters for clearer messaging, consolidation of information into the single booklet, preference for human faces over cartoons, and integration of health messages into calendars to enhance impact.

Likewise, participants emphasized diverse methods including the development of mobile applications, social media posts through the most used mobile apps (like Facebook, and TikTok), also via Short Message Service (SMS), and caller ringtones to disseminate health education. Furthermore, the clients and health officials highlighted the continuing value of printed materials along with digital platforms to disseminate health education to a broader audience.

The study identified major gaps in the availability, accessibility, and use of printed health education resources in Nepal. A holistic approach is required to address these difficulties, including improved distribution channels, budget allocation, digital innovations, and stakeholder engagement. Thus, by implementing these approaches, the effectiveness of health education in Nepal can be considerably improved, resulting in better health outcomes.

RESEARCH PROJECT 3: PREVALENCE OF SELECTED NON-COMMUNICABLE DISEASES AMONG CHILDREN AND ADOLESCENTS IN NEPAL: A CROSS-SECTIONAL PILOT STUDY

Non-communicable diseases (NCDs) are the leading causes of death and disability worldwide. About 1.2 million deaths from non-communicable diseases (NCDs) occur each year in people under the age of 20, which accounts for 13% of all NCD mortality. It has been estimated that approximately 70% of premature deaths occurring during adulthood are the result of health-related behaviors that are initiated in childhood and adolescence. Available literature shows that risk factors such as unhealthy diet, smoking, sedentary lifestyle, and obesity increase the risk of NCDs, with most of these commencing in early life which eventually impacts health across the life course. Given the high burden of NCDs in adulthood, it is vital to start addressing and managing these conditions during childhood and adolescence. There have been very few hospital-based studies but those might not provide accurate estimates of the burden at the population level. Therefore, this study aims to estimate the prevalence of selected NCDs: Bronchial Asthma, Diabetes mellitus (DM), Chronic Kidney Disease (CKD), and Neuro-developmental disorders (ID, Autism, ADHD) among children and adolescents aged 5-19 years in Nepal.

This community-based cross-sectional pilot study will be carried out in three selected districts of Nepal namely: Siraha, Lalitpur, and Dolakha, representing all three ecological belts (Terai, Hill, and Mountain region) of the country. The study population will include children and adolescents of both sexes, aged 5-19 years. Every sample will be screened for all the disease conditions proposed in the study. Sample size will be calculated considering the prevalence of Bronchial Asthma of 5.8% with a design effect of 1.5, a non-response rate of 15%, and the final sample size will be 3700. Data will be collected using face-to-face interviews. Android mobile devices equipped with open data kit (ODK) technology will be used to collect data. The data collection of this study will be started from the coming fiscal year.

RESEARCH PROJECT 4: BASELINE STUDY ON RICE FORTIFICATION PROGRAMME IN NEPAL

Despite recent improvements in the nutrition status of Nepal, the prevalence of malnutrition due to micronutrient deficiencies remains persistently high. Anemia rates are constantly high among vulnerable groups including under-five children, adolescent girls, and women of reproductive age. Notably, regional disparities in food security that exist particularly in the high mountainous areas of Nepal such as the Karnali region, contribute significantly to micronutrient deficiencies. The National Nutrition Strategy 2020 and other policy frameworks detailed in this report have recognized the fortification of staple foods as an effective strategy with considerable scale-up potential, and a viable solution to address micronutrient deficiency. Given the prominence of rice as a primary staple in Nepalese diets,

the widespread distribution of fortified rice presents an opportunity to deliver essential micronutrients to vulnerable populations at a reduced cost – with government subsidies in the transportation of fortified rice to targeted areas as a part of social protection initiatives. Hence, this baseline study on rice fortification aimed to assess the operational readiness of rice mills, the policy environment surrounding rice fortification, as well as consumers' and stakeholders' (local, provincial, federal level representatives and developmental partners) perceptions of rice fortification. This study analyzed food consumption patterns and the prevalence of anemia among under-five children and women of reproductive age to provide further insights into the potential effectiveness of the program.

The study employed a mixed-methods design, comprising both quantitative and qualitative approaches. It was a population-based cross-sectional study conducted among 412 women of reproductive age and primary caretakers of 568 under-five children across five districts of Karnali province during January and February 2024. Participants for the quantitative study were selected using a multistage cluster sampling method, and semi-structured questionnaires were utilized to gather data on sociodemographic characteristics, dietary intake including dietary diversity, household food insecurity, anemia status, and perceptions regarding rice fortification. Key informant interviews were carried out with provincial and federal-level representatives and stakeholders, while in-depth interviews were conducted with local-level representatives in selected districts of Karnali. Additionally, six rice mills at the provincial level were observed to assess operational readiness for rice fortification, and a desk review of existing policies and legislation was conducted. Quantitative data were entered and analyzed using statistical software SPSS version 22, while qualitative data underwent translation and thematic analysis using RQDA software.

The study explored the prevalence of anemia among women of reproductive age and children under five years of age. The overall prevalence of anemia among women of reproductive age was 28 percent, with pregnant women exhibiting a higher prevalence, at 34 percent. Ethnicity was found to be significantly associated with anemia among women, with respondents from marginalized ethnicities demonstrating a higher anemia prevalence. Similarly, more than half of the women had poor dietary diversity, which was notably worse among those without formal education.

Likewise, the study found that nearly all children were breastfed soon after birth and continued exclusively until six months. However, anemia was prevalent among these children (41.5 percent), though mostly mild, with only a few cases of severe anemia. Younger children aged between six and 23 months showed a higher risk of anemia, which was linked to inadequate dietary diversity. Half of the children aged 6-23 months (53 percent) consumed fewer than five food groups.

The assessment of food insecurity revealed that while most households owned land for paddy cultivation, very few produced enough rice to last more than six months. The majority of under-five children consumed increasing amounts of rice as they aged. Rice procurement was influenced by factors like education, and family size, with nearly half of the participants buying rice from government sources, while the rest relied on local markets. Although most respondents were unfamiliar with rice fortification, there was a strong willingness to try fortified rice if available.

In terms of operational capacities for rice fortification, the study found that there were insufficiencies in technical human resources for operating blending machines and orientation on rice fortification, particularly in private mills. Quality control systems were also found lacking in the rice mills, although slightly better in Food Management and Trading Company Limited (FMTCL) rice mills. Despite space availability for blending equipment installation in all mills, appropriate human resources were lacking, although mill representatives showed readiness to employ such personnel if fortification commenced.

RESEARCH PROJECT 5: FACTORS AFFECTING CHILDHOOD EXPOSURE TO URBAN PARTICULATES IN NEPAL (FACE-UP): WP7 EVALUATION OF ETHICAL DECISION-MAKING FRAMEWORKS AND THE CO-CREATION PROCESS OF INFORMATIONAL PRODUCTS REGARDING URBAN AIR POLLUTION

The FACE-UP project aims to reduce the lifetime vulnerability of urban children, particularly in Indonesia and Nepal (two Development Assistance Committee (DAC) listed Asian Countries), to non-communicable diseases by reducing childhood exposure to particulate air pollution (PAP) through context-appropriate personal interventions.

The research was designed in seven interrelated work packages (WPs) and co-produced, at every stage, by teams led by Co-Is in the UK (DU & IOM), Indonesia (ITB & UI), and Nepal (NHRC). WP1 determine how, when and where children are exposed to PAP in Kathmandu and Bandung; WP2 evaluate the effectiveness of low cost practices to reduce children's exposure to PAP; WP3 to estimate the health benefits associated with the reduction of exposure to PAP from WP2; WP4 investigates the contextual factors influencing uptake of exposure reduction practices; WP5 evaluates the policy and/ or formal management strategies currently in place for reducing children's PAP exposure; WP6 explore the ethical implication of recommendation of partially effective practices for children and WP7 to bring together the multifaceted effects of the contextual factors that determine behaviours, and the organizational leverage points for health promotion, determined in WP 1-6.

These WPs are covered under separate ethics applications. WP 1-3 research was conducted under ethics approval reference: 173/2023. The aim of WP 1-3 is the assessment of children's exposure to air pollution and effectiveness and health impact assessment of exposure reduction practices. Likewise, WP 4-7 focuses on the development of interventions for sustainable change in exposure reduction practices through understanding contextual factors influencing uptake, policy, governance, and ethical issues.

Therefore; WP7 is based on the findings of WPs 1-6 which were completed in 2023- 2024, and is the final package of the study. This WP aims to promote sustainable behavioral change regarding personal exposure reduction practices. Specifically, this WP7 focuses on (i) co-design and (ii) co-evaluation of public informational products to maximize their usefulness and uptake at a local and global level, and policy development.

Progress to Date

WP 7 is further classified into three phases; WP 7.1, WP 7.2 and WP 7.3. The first Phase (WP 7.1) is the informational product co-design phase involving focus group discussions (FGDs) with target audiences (children, teachers/parents/careers). During these FGDs, we aim to ascertain any learning biases relevant to producing the most effective products (leaflets/videos/posters). Namely, (i) which authority figures children will best learn from as characters in the products (e.g., doctor/parent/teacher) and (ii) the most engaging product style (e.g., animation/real people/animals). The findings will be used to create draft products with professional illustrators'/film makers. The second phase (WP 7.2) is the iterative evaluation of draft products with the target audiences. Individual interviews with naïve audiences will ascertain (i) individual knowledge change due to viewing the products, and (ii) aspects of the products that were disliked or misunderstood. If the initial evaluation implies modifications are required, these will be made, and a second evaluation conducted prior to the finalization of the information products.

The last phase (WP 7.3) is policy maker (governmental agencies and NGOs) engagement. We will (i) conduct workshops on ethical decision-making on the introduction of respiratory protection as an intervention to protect children, (ii) encourage policy change on such protective interventions, (iii) co-develop the informational products, (iv) secure appropriate endorsements and hosting/dissemination of products by relevant local and national agencies, (v) produce policy briefs.

Completed Tasks: WP 7.1

Focus group discussions (FGDs) with target audiences (children, teachers/parents/careers).

August 12, 13, 14: FGD was conducted with 59 Children ages ranging from 6 to 12 years. Four groups were formed and each group consisted of 15 children while one last group comprised 14 children.

August 21: FGD with Teachers: Only one FGD was conducted with teachers from the same school, and 16 teachers participated in the discussion.

August 22: FGD with Parents: One FGD was conducted for the parents. 14 parents participated in the discussion and the group dynamic was maintained based on the educational level. The selected parents had their children participate in the FGD.

August 23: Workshop with the stakeholders from the Ministry of Health, Nepal Health Education Information and Communication NHEICC, UNICEF, Lalitpur Municipality, ICIMOD, NEPCEMAC

Transcription and translation of the FGDs.

Ongoing Tasks: WP 7.1

Analysis of the FGD findings and weekly meeting on co-designing of product style (e.g., animation/real people/animals).

Preparation of the Summary of the FGDs findings.

Revising the booklet (one of the products designed for parents on protective measures from Air pollution)

Remaining Tasks: WP 7.1, WP 7.2 & WP 7.3

WP 7.1: The findings are to be used to create draft products with professional illustrators/film makers.

WP 7.2: Not started

WP 7.3: Not started

RESEARCH PROJECT 6: IDENTIFYING THE CAUSE OF DEATH USING VERBAL AUTOPSY IN MUNICIPALITIES OF NEPAL

The growing demand for health services under limited resources poses a challenge for the government to respond to people's health appropriately. Inadequate information to guide decisions on health policies and resource allocation is one of the obstacles to better policy development. A reliable assessment of disease-specific mortality rates is not yet possible in many parts of Nepal, due to a lack of adequate information and scientific categorization of the cause of death. Verbal autopsy (VA) is one of the most practical and sensible ways to collect essential mortality data and find out the accurate cause of death by interviewing family members and/or caregivers of the deceased regarding the signs and symptoms that preceded the decedent's death in regions where certified health professionals are limited. Thus, the main objective of this study was to identify the cause of death using verbal autopsy in selected municipalities in Nepal.

The cross-sectional study was conducted from the 28th of Shrawan to the 16th of Bhadra, 2078 to collect information on the deaths that occurred between 2077 Shrawan to 2078 Asar in Thaha Municipality and from the 14th to 28th of Jestha, 2080 and included all deaths that occurred between Baisakh to Chaitra, 2079 in Gosaikunda Rural Municipality and Mithila Municipality. A total of 802 deaths both registered and unregistered were identified. However, the complete verbal autopsy of only 779 cases was possible. Ethical Approval was taken from the Ethical Review Board of Nepal Health Research Council before the conduction of the study and was conducted in compliance with all human rights and ethical standards required by health researchers in conducting studies with human subjects. A face-to-face interview was conducted among caregivers of the deceased using a validated Population Health Metrics Research Consortium (PHMRC) questionnaire on Android device and the data were analyzed through SMART VA-Analyze (tariff 2.0).

The majority of deaths occurred among individuals over the age of 60 years, particularly in Gosaikunda, where this age group accounted for almost 70% of deaths. Neonatal mortality was notably higher in Mithila, although under-five death rates were consistently low across all regions. Thaha had the highest death rate among middle adults (30-59 years) at 32%, while Gosaikunda had the lowest at 24%. The average age of death was similar across all sites, with Thaha having the highest mean age (64.8 years) and Mithila the lowest (62.2 years). A higher number of male deaths were reported in all municipalities, with the greatest gender disparity in Thaha (63% male, 37% female). Mithila had the highest rate of registered deaths (76%), indicating strong registration practices, while Gosaikunda had the lowest (51%). The majority of deaths occurred at home across all

sites, particularly in Gosaikunda (83%), with Thaha reporting 8% of deaths occurring en route to health facilities.

Chronic respiratory diseases and ischemic heart disease emerged as leading causes of death across all municipalities, with significant gender-specific impacts. In Thaha, Chronic respiratory diseases were the leading cause, especially among females, followed by ischemic heart disease and stroke. Ischemic heart disease was the primary cause, mainly affecting males, while chronic respiratory diseases and falls were more common among females in Gosaikunda. In Mithila, both chronic respiratory diseases and ischemic heart disease were leading causes, with notable gender differences in prevalence. A significant percentage of deaths were categorized as 'undetermined' across all municipalities, highlighting the need for improved diagnostic and reporting systems.

NCDs were the leading cause of death in all three locations, with the highest percentage in Thaha (73.6%), followed by Mithila (70%) and Gosaikunda (62.1%). Injuries were more significant in Mithila (17.9%) compared to the other municipalities. Communicable, maternal, neonatal, and nutritional diseases had the lowest percentage of deaths in Thaha (12.7%) and Mithila (12.1%), whereas Gosaikunda had a higher percentage (24.6%).

In conclusion, the study underscores the substantial burden of chronic respiratory and cardiovascular diseases in these municipalities, along with notable gender disparities and differences in death registration and place of death. It also highlights the need for enhanced diagnostic capabilities and reporting systems to address the significant number of undetermined deaths. Home-based healthcare interventions, along with improved registration rates and targeted interventions for mortality are recommended to reduce the burden of diseases in these regions.

RESEARCH PROJECT 7: STUDY ON HEMOGLOBINOPATHIES AND G6PD DEFICIENCY IN TERAI DISTRICTS OF NEPAL

Hemoglobinopathies are a group of recessively inherited genetic disorders characterized by abnormalities in hemoglobin, the molecule in red blood cells that delivers oxygen throughout the body. So far, over 1000 abnormalities genotypically and some phenotypically such as thalassemia sickle-cell disease (SCD), etc. has been found. Glucose-6-phosphate dehydrogenase (G6PD) deficiency is the most common enzymopathy worldwide, affecting an estimated 400 million people. There are reported prevalence of Hemoglobinopathies and G6PD among Nepalese population especially among Tharu residing in western and far western regions. Despite a good number of research performed in this area, exact number of Tharu with haemoglobinopathies and G6PD is yet to be determined. Hence, this study aims to estimate prevalence of Hemoglobinopathies and G6PD and its associated clinical symptoms among 1-29 years of population residing in Terai districts of Nepal.

This nationwide study was planned to conduct in the Terai region of all provinces in Nepal. In this study, a cross-sectional survey was carried out in selected districts of the Terai, including Jhapa, Morang, and Sunsari in Koshi Province, and Chitwan in Bagmati Province. A total of 1,696 respondents aged 1-29 years were enrolled in the study: 551 from Bagmati Province and 1,145 from Koshi Province. Data collection was carried out in Baisakh and Jestha 2081.

The preliminary findings of the study revealed that 57.4% of male respondents in Bagmati and 58.8% in Koshi provinces were anemic (cut-off value 13 gm/dL). In contrast, the prevalence of anemia among female respondents was higher in Bagmati (58%) compared to Koshi (55%) (cut-off value 12 gm/dL).

Of the total 520 male participants in Koshi province G6PD activity was 4.0 ± 2.0 /gm of hemoglobin. Blood parameter analysis of participants showed that the mean WBC count was $9268.4 \pm$ cells/mm³ in Koshi and 7813.2 cells/mm³ in Bagmati. The mean RBC count for male respondents was 4.9 million/microliter in Bagmati and 5.2 million/microliter in Koshi, while for female respondents it was 4.9 million/microliter in Bagmati and 4.8 million/microliter in Koshi. Nearly half (44.6%) of the participants in Koshi had a mean corpuscular volume (MCV) below 80 fL, compared to 39% in Bagmati. More than half of the male respondents in both Bagmati (65%) and Koshi (59%) had hematocrit levels below the normal range (<42%). In contrast, the majority of female respondents (70-80%) in both provinces had normal hematocrit levels (36-45%). Approximately 20% of participants in Bagmati had platelet counts below 150,000/ μ L, compared to only 12% in Koshi. The average platelet count was 263,179/ μ L in Koshi and 232,221.4/ μ L in Bagmati.

RESEARCH PROJECT 8: POPULATION BASED CANCER REGISTRY

8.1 Cancer Incidence and Mortality Rate in the Kathmandu Valley 2020

NHRC has started the Population-Based Cancer Registry (PBCR) in Nepal since 1st January 2018. The Kathmandu Valley PBCR represents cancer statistics of the urban population which includes three districts such as Kathmandu, Lalitpur, and Bhaktapur. The NHRC has collaborated with the MoHP, the WHO country office in Nepal, and the International Agency for Research on Cancer (IARC) to provide international standard cancer registry data.

The Central Bureau of Statistics (CBS) Nepal had estimated approximately thirty million (29,348,627) population of the country in the year 2020. The Kathmandu Valley covered 11% of the total estimated population of the country which was 3,230,447 populations among them 1,668,183 men, and 1,562,294 women. The mentioned population was used as the population denominator of the Kathmandu Valley PBCR.

The Kathmandu Valley PBCR focused mostly on the health-facilities-based approach where relevant data were collected from health facilities concerned for the diagnosis, treatment, and palliation of cancer patients which includes hospitals, pathology laboratories, and hospices, etc. Secondary data as recommended by the IACR were collected from the medical records departments of the mentioned health facilities. The step-wise registration process was carried out to avoid duplication of the data as well as to ensure data quality control. CanReg5 software was used for data entry analysis.

The year 2020 was dreadful for all healthcare systems due to the COVID-19 pandemic. Despite that, PBCR was striving to capture cancer cases as much as possible. Overall 1717 new cancer cases were registered in 2020 in the Kathmandu Valley. Among

them, 785 were men and 932 were women. The crude incidence rate and age-adjusted incidence rate (AAR) for men were 47 and 70.2 per 100,000 populations, for women it was, 59.02 and 74.4 per 100,000 populations, respectively. Similarly, there were overall 713 death cases registered in the Kathmandu Valley which includes 377 men and 336 women. Crude mortality rate and age-adjusted mortality rates were 22.6 and 35.5 per 100,000 people respectively. Cancer incidence and mortality vary in three districts. Lalitpur district had a higher cancer incidence and mortality with AAR 87.9 and 91.7 per 100,000 in men and women respectively, and Kathmandu district had the lowest AAR which was 64.4 and 70 per 100,000 in men and women respectively. The Bhaktapur district had recorded AAR 74.6 for men and 69.4 for women in 2020. Similarly, cancer mortality among three districts of the Kathmandu Valley was highest in the Bhaktapur district for men (AAR 46.4 for men and 22.9 for women) and Lalitpur district for women (AAR 41.8 for men and 33.4 for women). Due to the devastating situation created by the COVID-19 pandemic, under-registration of 15-20% of cases in 2020 was experienced.

Concerning quality control, we assessed different parameters to ensure the quality control of the cancer registry data such as Cancers with Unknown Primary (CUP), Mortality-to-Incidence ratio (MIR), cancers with Microscopic Verification (MV), etc. There were 1.87% CUP cases, MIR 41.5%, and microscopically verified cases was 91%. The quality control parameters in the Kathmandu Valley registry show the appropriate quality of cancer data for a standard registry, however, more consistent data and registry need sustainable planning of resources (human resources, financial resources, and in-service training) and utilization of the evidence in the development of cancer control planning by the government.

8.2: Cancer Incidence and Mortality in Rukum Districts in 2020

The Rukum District PBCR represents cancer statistics of the rural population which includes two districts such as West Rukum and East Rukum. The objective of the cancer registry is to measure the cancer burden in terms of incidence and mortality, its trends, and patterns of cancer in the Rukum district. The cancer registry data will be useful in planning cancer control policies, and activities and in strengthening the cancer care services in this area.

The East and West Rukum, two districts having a combined total of three municipalities and six rural municipalities, are included in the Rukum PBCR. The Rukum (Rukum West and Rukum East) registry had covered an estimated population of 2,28,197 among them 1,00,875 males and 1,27,322 females. The mentioned population was used as the population denominator of the Rukum PBCR.

The Rukum (West Rukum and East Rukum) District PBCR focused mostly on the health-facilities-based approach where relevant data were collected from health facilities concerned for the diagnosis, treatment, and palliation of cancer patients which includes hospitals, pathology laboratories, and hospices, etc. Due to the lack of cancer treatment facilities in Rukum, the neighboring facilities were used by the patients, and approaches were made to get reports from these health centers during data collection. Also, the trained data enumerators mobilized in the communities. They

visited the health coordinators, health post-in-charges, FCHVs, ward chairpersons, and community leaders to identify the cancer cases and also visited particular households to collect the information. Collected data were then checked for accuracy, completeness, and residency, and were entered into the CanReg5 Software.

In the year 2020 the cancer registry recorded 72 incidence cancer cases including 33 males and 39 females. The crude incidence rate (CR) and age-adjusted incidence rate (AAR) for Male were 32.7 and 40.6 per 100,000 populations, for females it was, 30.6 and 41.0 per 100,000 populations, respectively. Similarly, thirty-three death cases were registered in the Rukum (West Rukum and East Rukum) District which includes fourteen Males and nineteen Females. Crude mortality rate and age-adjusted mortality rates for males were 13.7 and 17.3 per 100,000 populations and for males 14.9 and 21.1 per 100,000 populations. Cancer incidence and mortality vary in two districts. The East Rukum district recorded the highest incidence (Males 45.6 and females 35.5 per 100,000 populations. The West Rukum district had the lowest AAR which was 39.4 and 44.4 per 100,000 in Males and Females respectively. Similarly, cancer mortality in two districts of the Rukum District was highest in the west Rukum district for men (AAR 20.1 for males and 25.5 for females) and East Rukum district (AAR 11.7 for males and 10.7 for females. Due to the devastating situation created by the COVID-19 pandemic, under-registration of 20-25% of cases in 2020 were experienced. The Mortality to Incidence ratio (MIR) in Rukum district was 45.8%, Microscopic Verification (MV) cases was 63.8% and Cancers with Unknown Primary (CUP) cases were 2.77%. Mortality cancer cases were underreported because of the lack of cancer diagnostic and treatment facilities in Rukum District.

People have to travel 170 km to 1200 km for diagnosis and treatment of cancer. Hence, establishing the early detection centers in Rukum district is very important. In some cases, the date of diagnosis and the primary site should rely on the verbal information of the patient and their relatives. Due to a lack of scientific ways of data recording and reporting in health facilities, the cases obtained through the community could not be traced back to the hospitals affecting the exact representation of the cases.

RESEARCH PROJECT 9: FRAMEWORK AGREEMENT FIVE (FA5)/ THE IMPACT OF RAPID CLIMATE CHANGE ON THE BIODIVERSITY HEALTH INTERFACE (CLIMB)

9.1 Training Course in Medical and Veterinary Entomology

To enhance the capacity of Nepalese entomologists, public health professionals, and researchers, the Nepal Health Research Council, Ramshah Path, Kathmandu, Nepal in coordination with the Institute of Tropical Medicine, Antwerp, Belgium organized the 5 days training (May 8-12) on Medical and Veterinary Entomology. This training program was designed to provide an overview of mosquito taxonomy in Nepal, with a focus on the identification of different species and their distribution. The training was conducted by experts in the field of entomology and was aimed at scientists, researchers, and students interested in mosquito taxonomy.

9.2 Mapping of Vectors and Eco-bio-social Determinants under Varying Climatic Conditions in Nepal

Dengue virus is an *Aedes* mosquito-borne single stranded RNA virus belonging to the genus *Flavivirus* under the family *Flaviviridae* causing one of the four serotypes of dengue virus capable of causing dengue fever without any long-term effect to the life-threatening condition i.e., dengue hemorrhagic fever (DHF)/dengue shock syndrome (DSS). There is an upsurge of global dengue fever with half of the world's population at risk with an estimation of 390 million people infected each year, out of which 96 million clinical manifestation are severe. The America, South-East Asia, and Western Pacific regions are the most seriously affected, with Asia representing around 70% of the global burden of disease as per the WHO factsheets 2020 on Dengue and Severe dengue. Since a major outbreak in 2006, Nepal has experienced regular yearly outbreaks of dengue, ranging from lowland to highland areas, with significant outbreaks occurring in 2022.

Understanding people's perceptions of the disease is crucial for developing better intervention strategies. Although various studies have been conducted in different regions of Nepal, there has been a lack of focus on the different altitudinal region of eastern Nepal. Therefore, this study aims to assess people's knowledge, attitudes, and practices (KAP) regarding dengue and its vector prevention and control at different altitudes in the eastern region of Nepal, to explore eco-bio-social determinants for vector prevention and control measures in different eco-regions and to investigate the presence of vectors; Mosquitoes and sandflies.

For KAP survey, participants were categorized based on their residence in either highland or lowland areas. The knowledge, attitude, and preventive practices related to dengue among the participants were assessed using a structured questionnaire, and KAP scores were calculated accordingly. Sociodemographic characteristics of the participants were recorded and analyzed to identify their association with KAP levels, employing logistic regression for comparison. Of the 662 participants in the study, 68.9% were from lowland areas, while only 31.1% were from highland regions. Almost all participants (98.3%) had previously heard about dengue. However, only 6.9% demonstrated good knowledge about dengue, 80% exhibited a positive attitude, and 26.7% showed good practice, with no significant difference between highland and lowland participants. Gender, education level, and income were significant predictors of both attitude and practice. There was a negative correlation between knowledge and attitude, and between attitude and practice. However, there was no significant correlation between knowledge and practice.

Key informant interviews were conducted among officials from the provincial health directorate at the provincial level, public health officers representing each district at district level and focal persons from municipalities, health post in-charges, and Female Community Health Volunteers (FCHVs) at the local level. Additionally, In-depth interviews were done amongst socially engaged community members and Focused Group Discussions (FGDs) was done with the individuals from the general community.

FGDs, KIIs and IDIs was recorded in the recorder with the approved consent. The data were then transcribed in Nepali language and translated into English. Themes and sub-themes were defined to create a 'code list' and thematic analysis was carried out.

The study focused on the prevalence of vector-borne diseases in the Koshi Province of Nepal, with a particular emphasis on dengue fever. Findings indicated dengue as the most prevalent disease, though other diseases like malaria, kala-azar, Japanese encephalitis, filariasis, and scrub typhus had been reported previously but had significantly reduced in number. Factors affecting dengue prevalence were the rise in temperature, climate change, and geographical location. The most likely sites to contract the disease were warmer and lower elevations, but because disease-carrying vectors were moving higher due to climate change, cases have also been discovered in hilly and mountainous regions. Also, Dengue outbreaks were particularly common during the monsoon and festive seasons. Imported cases, brought by individuals traveling from high-prevalence areas, were highlighted as a significant contributor to the spread of dengue. Also, few understood the role of global warming in mosquito spread, highlighting the environmental impact on disease transmission.

For entomological survey altogether 399 water holding containers belonging to 145 households/ premises were investigated for mosquito immatures. In the same process mosquito adults and sandfly were also collected in and around the houses. Altogether 2244 immatures belonging to four genera Aedes (49.51%), Culex (21.61%), Anopheles (1.02%) and Armigeres (9.76%) were identified. Likewise, a total of 90 adults mosquitoes belonging to three genera Aedes (25.56%), Anopheles (14.44%) and Culex (60%) were recorded and 77 sandflies belonging to two species *Sergentomyia babu* (n=57) and *Phlebotomas papatasi* (n=24) were recorded in this survey. In conclusion, this cross-sectional study highlights the significant presence of wide range of disease vectors, in the eastern part of Nepal, underscoring the need for targeted vector control and public health initiatives. The findings of our study also underscore the participants' poor knowledge about dengue and reveal that their positive attitudes did not translate into practical actions. This gap directly impedes further prevention efforts in the community. Therefore, there is a clear need for effective educational interventions and increased awareness to address this issue.

9.3 Training Course in Medical and Veterinary Entomology, Barcoding Surveillance of Mosquitoes in Nepal

The main objective of the "minion workshop on barcoding of mosquito surveillance in Nepal" was to train participants in using DNA barcoding techniques for mosquito surveillance. The workshop involved teaching them how to collect mosquito samples, extract DNA, amplify specific genetic regions (like the COI gene commonly used in barcoding), sequence the DNA, and analyze the resulting sequences to identify mosquito species.

9.4 Building up of Insectary at Nepal Health Research Council

As a part of the FA5 project, Nepal Health Research Council in coordination with the Institute of Tropical Medicine constructed the insectary at Nepal Health Research Council in September 2023. Heat exposure experiments on dengue vectors were conducted after its construction.

9.5 Mosquito Diversity in Central Nepal

The study was conducted across seven sampling sites in Central Nepal: Chitwan, Dhading, Dharke, Goldhunga, Kathmandu, Malekhu, Naubise, and Ranipauwa. A total of 1,363 larvae and 636 pupae were collected. The highest number of mosquitoes was observed in Chitwan (435 larvae and 139 pupae), followed by Kathmandu (398 larvae and 155 pupae) and Goldhunga (179 larvae and 121 pupae). *Aedes aegypti* was the most prevalent species, particularly in Chitwan (188 males and 223 females) and Kathmandu (153 males and 158 females). *Aedes albopictus* was prominent in Goldhunga, while smaller numbers of *Culex quinquefasciatus*, *Aedes pseudotaeniatus*, and other species were distributed across various sites. This indicates a diverse mosquito population in the central region, with Chitwan and Kathmandu emerging as key areas for *Aedes* species prevalence.

9.6 Adaptation of Dengue Vectors to Climate Warming

In 2023 (August-September), *Aedes* eggs were sampled at 11 sampling sites along an altitudinal gradient (92-1800m) in Central Nepal. Eggs were sampled according to previously established protocols in Nepal using black ovitraps with white cotton sheets. Per site eggs were sampled over a 5-day period. After counting of eggs in field laboratories, for later experiments egg were transported in transported boxes to the NHRC insectary in Kathmandu, Nepal. Until further use, eggs were stored in the respective transport boxes to secure stable humidity and temperature conditions at room temperature.

9.7 Plasticity of the *Aedes* Vectors to Heat

Eggs were hatched per site in yeast solution at the insectary. Hatched larvae were fed (TetraMin) under a feeding protocol. Hatched pupae were moved in 1.5 ml vessels. Emerged adults were identified at species level and were used for heat shock experiments at the age of 2 days. Heat shock experiments were carried out with ~20 adults per species and sampling site (control group: ~20 individuals per site at room temperature). Those that survive the experiment were killed subsequently. All adults were stored in Ribonucleic Acid (RNA) later and shipped to Institute of Tropical Medicine (ITM).

9.8 Sampling for Introgression Experiment

To compare the functional diversity of heat-resistant and non-resistant populations, eggs from altitudinally different districts, Chitwan (200m), Kathmandu (1300m) and Goldhunga (1500m) were collected using the ovitraps. A total of 11000 eggs were sent to Belgium for further experiments.

9.9 Sampling of Adults for Virology Experiment

To investigate virus biodiversity within vector species along the gradient, 100 female adults *Aedes aegypti* and *Aedes abopictus* were collected from Chitwan, Dhading, and Kathmandu. Described adults were conserved in RNA later Here, samples will be stored at -80°C before their shipment on dry ice to the virology unit at ITM. Per species, RNA will be extracted from male and female field-caught adults. Multiple pools (RNA from 50 individuals) will be screened for the presence of the dengue, Chikungunya, Zika, or Japanese encephalitis virus using a multiplex PCR assay. Virological diversity (% of positive pools per site, number of detected arboviruses) will be analyzed in a database.

9.10 Training Manual Vector Borne Disease(VBD) Embedded Implementation Research

A training manual on the VBD embedded implementation research was prepared to target the researchers and policymakers. Stakeholders consultation workshop has been conducted to refine the training manual.

9.11 Proposal on Impact of the Community-Based Interventions to Control Dengue in Koshi Province of Nepal

A draft proposal on the impact of the community based interventions to control dengue in Koshi province has been prepared.

RESEARCH PROJECT 10: RISK FACTORS OF BREAST CANCER IN NEPAL: A CASE-CONTROL STUDY

The incidence of breast cancer is increasing worldwide, including in low- and middle-income countries such as Nepal, and thus placing a significant burden on the healthcare system. Inadequate awareness of cancer prevention, adoption of unhealthy lifestyles, and unequal distribution of quality health services have been some of the major factors affecting cancer management. It is therefore crucial to identify and understand the local risk factors to understand the specific epidemiological, socio-cultural, and economic dynamics associated with breast cancer incidence and to develop effective prevention and cancer control strategies in the country. This case-control study aims to identify the risk factors of breast cancer in Nepal.

A hospital-based age and sex matched case-control study was conducted in major cancer hospitals in the Kathmandu Valley. The cases who have been diagnosed or undergoing treatment or on follow-up for breast cancer were selected as cases, and any other women present in the hospital without any cancer were selected considering commonalities in age were designated as controls. The case-to-control ratio was 1:3. A semi-structured questionnaire tool was used for data collection, and a face-to-face interview was taken. Anthropometric measurements (height, weight, BMI) were measured. Pretesting was done on 10% of the sample size and necessary modifications was made accordingly. Data analysis was done in the SPSS. Descriptive statistics such as frequency distribution and percentage of demographic profiles was analyzed. Logistic regression was used for

obtaining odds ratio (OR). The significance level (α) of 0.05 was used for all statistical tests.

A total of 1076 participants were included in the study with 269 cases and 807 controls. Majority of the participants were between the age group of 45-54 years, Brahmin/Chhetri ethnic group, Hindu by religion, married, unemployed/homemaker and had household earning of < 45000 NRS per month; while majority of cases were illiterate or had informal education and majority of controls had secondary education.

The odds of developing breast cancer were found higher among the 34-45 years age group, Newar/Janajati/Dalit ethnic group, single women, illiterate women, employed and farmers and those with family income less than 45,000 NRs per month. Women who had consumed oral contraceptive pills (OCPs) and hormone replacement therapy (HRT) for longer duration more than a year had higher odds of developing breast cancer. Reproductive risk factors include irregular menstrual period, cycle length of 29-34 days and early menopause at < 45 years. Current smokers and only gentle physical exercise also increase the risk. However, women who consume fresh fruits regularly and fish weekly had lower odds of having breast cancer. In addition, women who had a history of benign breast tumor had higher odds of developing breast cancer.

Breast cancer is one of the commonest cancers among females worldwide including Nepal. Understanding local risk factors in Nepal is necessary to help policy makers and relevant stakeholder to plan, develop and implement breast cancer prevention and early detection strategies tailored to Nepal. Our study had explored various modifiable risk factors of breast cancer in Nepal like the use of OCPs, HRT, smoking, less exercises, which could be prevented. Similarly, some modifiable protective factors were also found like consumption of fresh fruits and fish that could be promoted. Our study had also identified which group of population should be targeted and at what age screening should be started in order to minimize breast cancer in Nepal. These evidences provided to the government can make the basis to plan and develop breast cancer control strategies in Nepal.

RESEARCH UPTAKE AND COMMUNICATION

NATIONAL HEALTH SUMMIT

NHRC conducted the 10th National Summit on Health and Population Scientists in Nepal with the theme “Advancing Health on Population Research and Innovations: Achieving SDGs” from 10-12 April in Hyatt Regency, Boudha Kathmandu.

The tenth summit was attended by more than 1000 individuals in person, and with more than 800 participants registering for virtual participation. The summit was inaugurated by Rt. Hon. Mr. Ram Chandra Paudel, President of the Federal Republic of Nepal. The inauguration session was attended by special guests Hon. Deputy Prime Minister and Minister for Health and Population Mr. Upendra Yadav, Vice Chairperson of Medical Education Commission Prof. Dr. Anjani Kumar Jha, Hon. Member of National Planning Commission Dr. Shiva Raj Adhikari, Secretary of Ministry of Health and Population Dr. Roshan Pokhrel, Additional Secretaries of Ministry of Health and Population, Chairman of NHRC Prof. Dr. Gehanath Baral, Member Secretary - Executive Chief of NHRC Dr. Pramod Joshi, Executive Committee Members of NHRC, Vice Chancellors, Registrars, and Deans

of Academic Institutions, Joint-Secretaries, Directors and Division Chiefs of Ministry of Health and Population, International and National Guest Speakers, Researchers, Program Managers, Journalists and Media Personnels.

A total of 57 oral and 263 poster submissions were selected for presentation in the Summit. Three panel discussions were also held covering a wide range of pressing issues including health policy reform and financing, evidence-based medicine and clinical practice, and implementation research and capacity building.

Ten different awards were presented in the summit for the following categories: JNHRC Best Research Paper Award, Health Research Award, Young Health Research Award, Mrigendra Samjhana Medical Trust Young Health Researcher Award (Medical Doctor), Mrigendra Samjhana Medical Trust Young Health Researcher Award (NHRC Employee), Health Research Life-time Achievement Award, Best Paper Presentation Award (Poster), Paper Presentation Award (Oral), NHRC Best Section Award, and NHRC Best Performer Award. The individuals who received awards were selected based on their contributions, creativity, and innovation in the field of health research. Besides, this year three different awards have been introduced entitled Research Grant Award, Media Award and Award for NHRC staff who served for more than 25 years. The declaration of the summit was presented at the end of the summit. The summit was concluded in the presence of Chief Guest Hon. Deputy Prime Minister and Minister for Health and Population Mr. Upendra Yadav, Special Guest Secretary of Ministry of Health and Population Dr. Roshan Pokhrel, Chairman of NHRC Prof. Dr. Gehanath Baral, Member Secretary - Executive Chief of NHRC Dr. Pramod Joshi, and Executive Committee Members of NHRC. The declaration of the summit is as follows,

1. We urge for strengthening health research ecosystem and governance in Nepal, ensuring that health research is ethical and responsive to national priorities.
2. We agree that evidence generated from health research be translated into the policy to bridge the gap between evidence and health policy and practices.
3. We collectively commit to emphasize the importance of interdisciplinary and multidisciplinary research approaches that combine insights from public health, social sciences, and bio-medical sciences including clinical settings, environmental sciences, and technologies to address the wider determinants of health.
4. We urge to create an enabling environment for the development and implementation of financing mechanisms that ensure equitable access to quality health services without financial hardship.
5. We call to address the emerging issues of climate change to mitigate its impact on health and the environment and also to build a resilient public health system to address disaster, epidemics and other emergencies.
6. We collectively commit to continue prioritizing public health research, clinical research, digital health, innovations and technologies including artificial intelligence in health research.

DISSEMINATION OF HEALTH RESEARCH FINDINGS ON “UNDERSTANDING THE AVAILABILITY AND UTILIZATION OF OXYGEN AND ITS SUPPLY SYSTEM WITH A FOCUS ON NEWBORNS AND PEDIATRIC OXYGEN DELIVERY EQUIPMENT AT VARIOUS LEVELS OF HEALTH FACILITIES IN NEPAL”

Under the chairmanship of Dr. Dipendra Raman Singh, additional secretary of MoHP, dissemination of the oxygen plant study was organized. Around 35 participants were present in the dissemination. The research findings highlighted the availability and functionality of oxygen supply are particularly insufficient in rural hospitals in Nepal. The health care professionals reveal challenges in service delivery despite the established oxygen supply systems across major hospitals, both governmental and private. Maintenance and functionality remain problematic areas. Inadequate human resources, particularly skilled biomedical technicians and engineers, pose a significant challenge. Moreover, a lack of training among healthcare personnel in operating oxygen supply systems was identified as the most significant challenge expressed by the participants. Financially, the absence of clear budget allocations for maintenance and procurement led to delays and affected functionality. There is also a deficiency in formal information systems for biomedical management and oxygen supply recording protocols. Hospital administrators and biomedical personnel played vital roles in managing the oxygen supply system.

CHAPTER 3: ETHICAL REVIEW AND MONITORING AND EVALUATION SECTION

Among the various objectives of NHRC, promoting responsible conduct of health research and regulation of all health-related research conducted in Nepal is one. Research that is scientifically and ethically sound will only be approved through the ethics review process. For this, the NHRC has published the National Ethical Guidelines for Health Research and formed the Ethical Review Board (ERB) to oversee the responsible conduct of research in Nepal. In addition, Institutional Review Committees (IRCs) have also been formed in different institutions, each tasked with managing the ethical review process within their respective organizations. Additionally, the ERB of NHRC has been accredited by the Forum for Ethical Review Committees in the Asian and Western Pacific Region (FERCAP) since 2019, a recognition of its commitment to maintaining ethical standards in research.

During the fiscal year 2080/81, the ERB section undertook numerous activities, which are summarized below.

Table 4 Activities Performed by the Ethical Review, Monitoring and Evaluation Section for the Fiscal Year 2080/81

Events	Number
Total Protocol Registration	678
Approved Protocol	550
On Process	120
Withdrawn	1
Pending	7
Ethical Review Board Meeting/ Expedited Meeting	73
M & E of approved studies	27
M & E of IRC	11
Training/ workshop to ERB	2
Training /workshop to IRC	3

The name of the researcher and the title of the research projects that have been approved by the ERB in the fiscal year 2080/81 are shown in the Annex 2.

MONITORING VISIT OF IRCS

- Nepal Medicit Hospital
- Star Hospital
- Annapurna Neurological Institute & Allied Sciences

- Rapti Academy of Health Sciences
- Norvic International Hospital Pvt. Ltd
- Pokhara University
- Kanti Children's Hospital
- Chitwan Medical College
- Shree Medical and Technical College
- College of Medical Sciences
- B.P. Koirala Memorial Cancer Hospital
- Kathmandu Cancer Center

TRAINING WORKSHOP TO ETHICAL REVIEW BOARD MEMBERS

- Workshop on Clinical Trial Guidelines (Draft)
- Orientation/Refresher Training Workshop on National Ethical Guidelines and SoPs

RESEARCH STUDY: DEVELOPING NATIONAL AND GLOBAL AGENDAS FOR THE ETHICS OF POST-TRIAL ARRANGEMENTS IN LOW AND MIDDLE-INCOME COUNTRIES DURING PANDEMICS/EPIDEMICS (PANDEMIC ETHICS).

Post-trial access (PTA) is an ethical imperative to ensure that products developed and knowledge generated during clinical trials are made available to study participants, populations, and communities. This principle becomes particularly crucial when access to safe and effective therapies is limited or when no existing therapies are available. PTA encompasses continued access to investigational drugs or interventions (e.g., through extension trials), communication of trial results to participants, provision of counseling, and post-trial care. Despite its significance, current PTA guidelines are often ambiguous, inconsistent, and lack nuance. Only a few countries, such as Brazil and India, have enacted PTA legislation, though the effectiveness of these laws during pandemics or epidemics remains to be fully examined.

The Pandemic Ethics Project seeks to develop both country-specific and global frameworks for equitable and practical PTA arrangements in low- and middle-income countries (LMICs) during epidemics and pandemics. Ensuring PTA in LMICs directly aligns with three Sustainable Development Goals (SDGs): SDG 3 (Good Health and Well-Being), SDG 10 (Reduced Inequalities), and SDG 5 (Gender Equality). While PTA aims to address the equitable distribution of research benefits, there is often uncertainty about its availability and distribution. The COVID-19 pandemic highlighted the urgent need for global solutions, as epidemics transcend national borders, making PTA a global concern. Between December 2019 and the present, ClinicalTrials.gov registered 7,279 studies worldwide, with the majority in North America (USA and Canada) and Central Europe (4,508), while a significant number were conducted in LMICs (2,771), including Southeast Asia, South Asia, Africa, and Latin America. Although vaccines and other interventions

became available by late 2020, ensuring equitable access remains a broader challenge. This study aims to explore, describe, and provide recommendations regarding PTA in Nepal, comparing it with six other countries.

The project will be executed through six work packages (WPs) systematically. In WP1, a review of grey literature, scientific publications, and mass/social media related to PTA will be conducted. WP2 will involve in-depth interviews (IDIs) and focus group discussions (FGDs) to explore the experiences, roles, responsibilities, perceptions, challenges, and expectations of stakeholders regarding PTA. WP3 will focus on reviewing PTA arrangements from COVID-19 clinical trial protocols and the minutes of research ethics committee meetings. WP4 will use the data collected from WPs 1, 2, and 3 to formulate recommendations for global and local PTA systems and PTA ethics guidelines. WP5 will address communication, dissemination, and exploitation, including the development and piloting of a one-day Pandemic Ethics train-the-trainer workshop. WP6 will ensure effective project execution and the timely achievement of project objectives within the allocated budget of Rs. 13,031,432.00 for two sites: The Institute of Medicine and NHRC.

Progress to date:

Ongoing monthly partner meetings held during the last week of each month. Work packages 1, 2, and 3 are currently in progress.

CHAPTER 4: LIBRARY AND INFORMATION SECTION

NHRC library was established to provide research-based health information. It is being utilized by all health and related professionals involved in research activities. It serves as a repository for health research-related information and resources.

STRENGTHENING DIGITAL LIBRARY

NHRC library has a collection of research-based books/tapes/documents and CD-ROMs and is actively networking with other health research libraries. Library data is classified under an internationally accepted classification scheme developed by the National Library of Medicine, USA; using MESH (Medical Subject Heading).

NHRC library has established a network with other health-related libraries and information centers based in Kathmandu. It is also an active member of HELLIS Nepal which is a communication center and national focal point. Being Associated with HELLIS Nepal, NHRC library is participating in developing the HELLIS Nepal web page. This association will add the presence of NHRC Library not only at national but also at the International level.

NHRC library would like to be known as an active health research information center, which will provide research-based information on all aspects of health-related subjects available in the country. NHRC library can access HINARI. HINARI Programme set up by WHO together with major publishers, enables developing countries to gain access to one of the world's largest collections of biomedical and health literature. Up to 11,400 journals (in 30 different languages), up to 18,500 e-books, and up to 70 other information resources are now available to health institutions in more than 100 countries, areas, and territories benefiting many thousands of health workers and researchers, and in turn, contributing to improve world health. Information is provided not only through books but also online via Internet Connection. These facilities assist scholars and health professionals with information in their respective fields in much more convenient way.

SERVICES OF NHRC LIBRARY

- Computerized Retrieval Service
- Internet Services:
- References Services
- Informational
 - Bibliographic
 - Instruction
 - Indexing Services
- Articles downloading & printing
- Assistance with online Search users
- Literature Search Facility

LIBRARY HOURS

Summer

Opening hours: 10.00 a.m. to 5 p.m. Working hours: 10.00 a.m. to 5 p.m.

Winter

Opening hours: 10.00 a.m. to 4 p.m. Working hours: 10.00 a.m. to 4 p.m.

LIBRARY NETWORKS FOR RESOURCES

- Maharajgunj Nursing Campus
- Ministry of Health and Population
- National Academy of Medical Sciences
- TU IOM Maharajgunj Campus Library

USER GROUPS

- NHRC Executive Committee Members
- Policy Makers
- Program Managers
- NHRC Staffs
- Researchers
- Health Care Professionals
- Students

The same user groups are also visiting the online library.

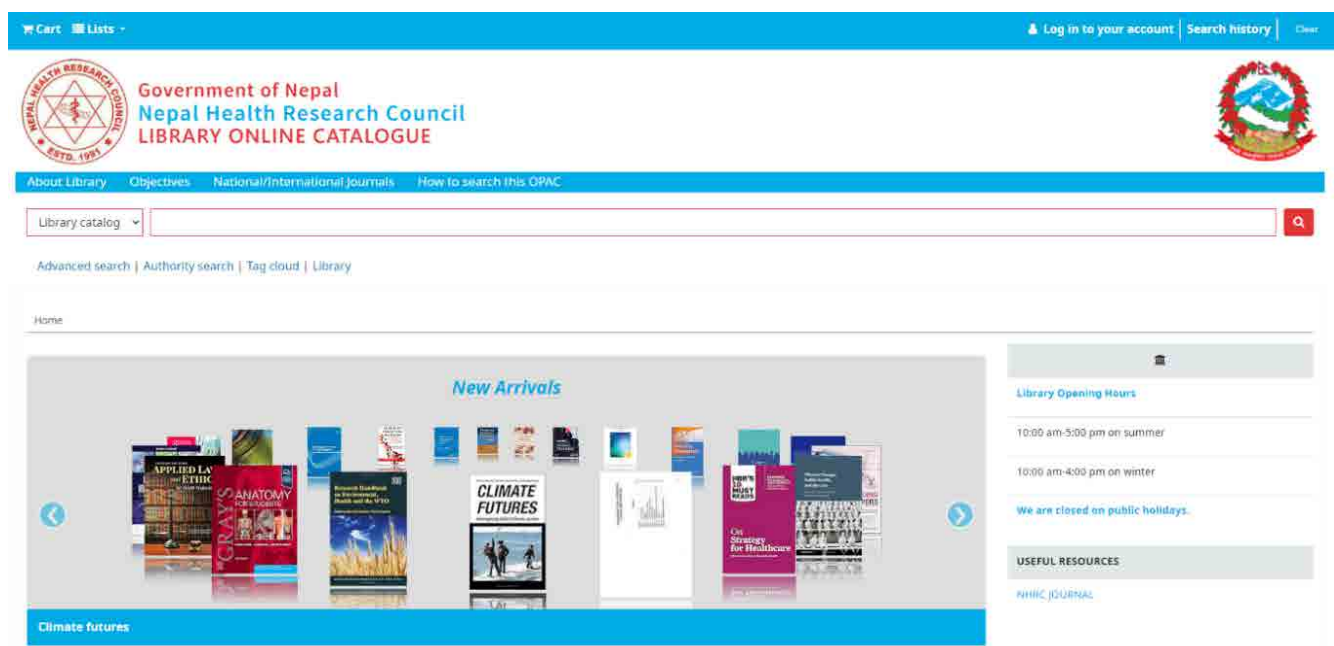


Figure 2 NHRC Library Online Catalogue

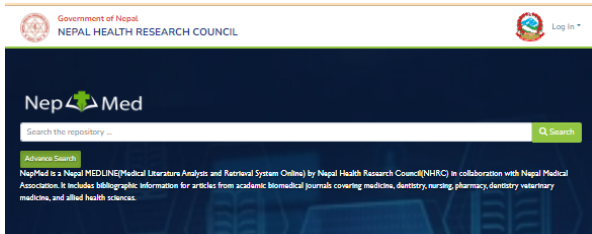


Figure 3 NEPMED Repository System



Figure 4 NHRC Repository System

Web-based online Catalogue using KOHA Automation System & NHRC Digital Repository for full text using DSPACE system.

The work completed in fiscal year 2080-81 by NHRC Library.

- Purchased books for NHRC users
- Developed the web-based NEPMED health Journal Repository system with new features.
- Scanned more than 200 Journal research & thesis reports for the online library repository system.
- Provided the scientific indexed health journals information via email and assist the researchers with their research on how to access the scientific paid articles. The methods were "Face to Face"; Google Meet; and Skype using tools nationally and internationally.

CHAPTER 5: CAPACITY BUILDING SECTION

PUBLICATION OF JOURNALS

Varied types of scientific papers were published by the publication section of NHRC in the fiscal year 2080/81 that mostly comprised case reports and original research works followed by reviews, editorials, viewpoints, medical education, letters to the editor, and short communication in several issues of Journal of NHRC.

Table 5 Published Issues in the FY 2080/81

S.N	Published Issues
1	Issue 63 April-June 2024
2	Issue 62 Jan-March,2024
3	Issue 61 Oct-Dec,2023
4	Issue 60 July-Sep,2023
5	Issue 59 April-June, 2023
6	Issue 58 Jan-March, 2023

CONDUCTION OF TRAININGS

NHRC has conducted the following training in this FY.

Title	Number of Trainings	Location
Training on Health Research Proposal Development	Three	Kathmandu
Training on Data Management and Analysis	Three	Kathmandu
Training on Data Management and Analysis	One	Madesh Institute of Health Sciences

CHAPTER 6: FINANCE SECTION

The details of the income and expenditure are mentioned below:

Table 6: Details of Income and Expenditure

S.N	Details	Amount (in NRs)
1	Government of Nepal	101,100,000.00
2	Internal Funding from NHRC	89,570,000.00
3	Total Expenditure	91,832,966.06

KEY LESSON LEARNT

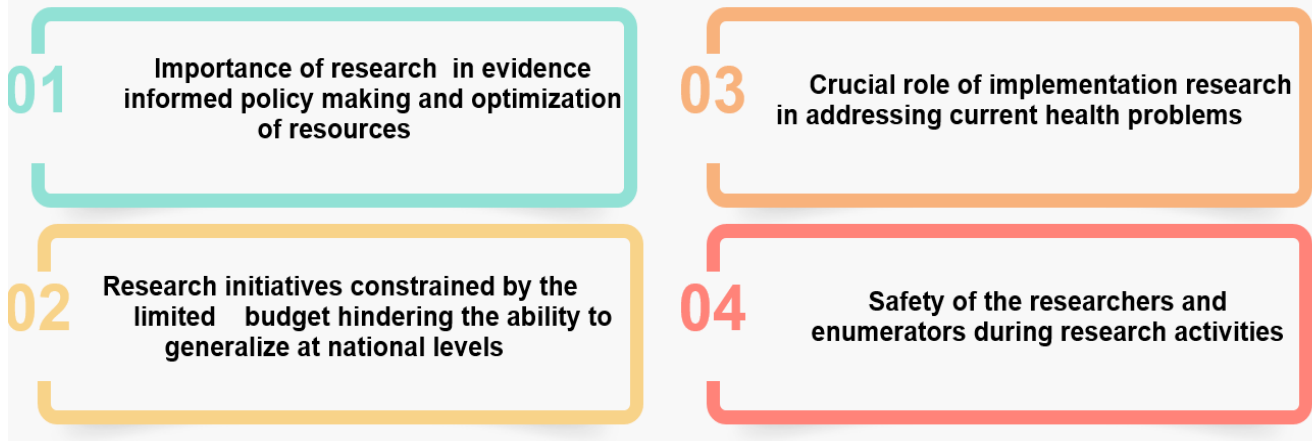


Figure 5: Key lesson Learnt

CHALLENGES



Figure 6: Challenges

WAY FORWARD

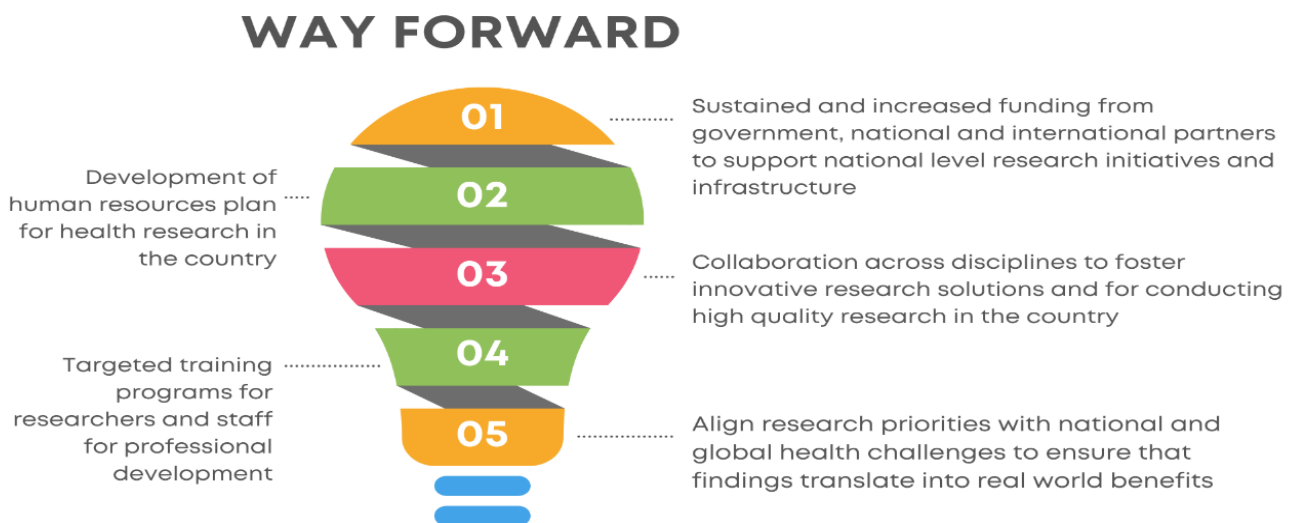


Figure 7: Way Forward

ANNEX 1: NHRC REPRESENTATION IN NATIONAL AND INTERNATIONAL PROGRAMS

1. Prof. Dr. Gehenath Baral, Chairman NHRC, Dr. Pradip Gyanwali, Member Secretary - Executive Chief Prof. Dr. Ramesh Kant Adhikari, Chairman, ERB, Namita Ghimire, Research Officer, and Subash Ghising, Admin Assistant visited Kuala Lumpur Malaysia, to attend 23rd international FERCAP Conference, from 25th November 2023 to 1st December 2023.
2. Ms. Namita Ghimire, Research Officer, NHRC visited Paris, France to attend the program, "Towards the dissemination of the global ethics charter for the protection of healthy volunteers in clinical trials", from 16 -22 April 2024.
3. Dr. Meghnath Dhimal, Senior Research Officer of NHRC visited Denmark to attend the Global Science Summit, 6-7 May 2024, Copenhagen, International Conference of Young Scientists, 8-11 May, Washington DC, USA, European Union Pandemic Conference 14-15 May 2024, Research Collaboration meeting on implementation research and climate change & health, 16-18 May 2024 at National Institute of Public Health, Oslo, Norway and Research Collaboration and networking meeting at WHO Geneva on 20 May 2024.
4. Dr. Pramod Joshi, Member Secretary - Executive Chief, and Mr. Sarswoti Prasad Bhattarai, Store Officer, visited Europe, to attend the climate change and health-related international conference and meeting, from 11-22 May 2024.
5. Dr. Pramod Joshi, Member Secretary - Executive Chief of NHRC was appointed as a member of the Antibiotic Resistance National Steering Committee on 21st March 2024.
6. Dr. Meghnath Dhimal, Senior Research Officer of NHRC attended the Igniting HPSR Futures: Empowering Torchbearers in the Asia-Pacific Strengthening the ecosystem for health policy and systems research for health systems strengthening in Asia June 5-7th, 2024 Gran Melia Hotel Jakarta, Indonesia
7. Dr. Pramod Joshi, Member Secretary - Executive Chief of NHRC visited United States of America, to attend the 28th Annual Meeting on Health Care Initiative and Plan for the Future, University of Maryland, for climate health research collaboration, and San, Diego State University for research collaboration and networking meeting (6-18 June 2024).
8. Mr. Subodh Kuamr Karna, Chief of Final Administration Section visited to University of Maryland, for climate health research collaboration, and San, Diego State University for research collaboration and networking meeting (7-18 June 2024).
9. Dr. Meghnath Dhimal, Senior Research Officer of NHRC visited Harvard T.H Chan School of Public Health for attending a data harmonization workshop and delivering an invited talk on climate change and health in Nepal (17-22 June 2024) and attended the 2024 Ecology and Evolution of Infectious Diseases (EEID) Conference organized by Stanford Univeristy, 24-27 June 2024 as an invited speaker

ANNEX 2: NAME LIST OF THE APPROVED RESEARCH PROJECT BY ETHICAL REVIEW BOARD

Adolescent Health

Chandra Rekha Issar	Maternal and Perinatal Outcomes of Adolescent Pregnancy in a Tertiary Care Hospital
Archana Bhatta	Effect of Nutrition Education Intervention Through the Health Belief Model (HBM) on Knowledge, Attitude, and Dietary Practices of School-going Adolescents of selected schools of Ratnanagar Municipality
Narayan Subedi	Understanding of the Global Adolescent and Children Physical Activity Questionnaire in Nepal
Rubina Awale	Exploring mental health experiences and outcomes of Queer Adolescents and Youths in Kathmandu and Pokhara, Nepal
Rajeeb Satyal	Attitudinal & Lifestyle Study And Media Consumption/Habits Survey - 2023 In Three Provinces Of Nepal

Ayurveda and Traditional Medicine

Bishal Joshi	The effect of vipassana meditation on heart rate variability and attention
Bishundayal Prasad Patel	Local Natural Resource Utilization for Healthcare and Livelihood Generation

Biomedical Research

Bipin Chapagain	Phenotypic and Genotypic Characterization of Vancomycin-resistant Enterococcus Isolated from Clinical Samples
Bhupal Govinda Shrestha	Evaluating the Potential of miR-205 as a Molecular Diagnostic Biomarker for Cervical Cancer
Soma Kanta Baral	Antimicrobial Potential of Some Nepalese Medicinal Plants against Multi-Drug Resistance Escherichia coli Isolates
Sunil Pandey	Metagenomic Analysis of Antibiotic Resistance Genes in Wastewater Treatment Plant in Kathmandu, Nepal
Raju Kaiti	Assessment of Antimicrobial Resistance Profile in keratitis Isolates at a Tertiary Eye Hospital in Central Nepal
Sanjivan Gautam	Generation and Preclinical Validation of CD19 specific Chimeric Antigen Receptor Expressing T cells to Treat B cell Malignancies

Communicable Disease

Man Mohan Mishra	Bidirectional Screening of Tuberculosis and Diabetes Patients in the Gandaki Province of Nepal
Bimalesh Kumar Jha	Circulation of Dengue Virus Serotypes in Nepal from 2022 to 2023

Sameer Mani Dixit	Assess Immunization coverage and knowledge of mother/care givers towards vaccination in 13 districts (Gavi DLI based) of Nepal
Naveen Prakash Shah	Comprehensive intervention strategy to improve retention in TB infection cascade of care in high-risk groups through a person-centered approach in the SEAR countries
Anand Ballabh Joshi	Active surveillance for visceral leishmaniasis in selected new foci districts in Nepal: feasibility, acceptability and cost
Buddha Basnyat	Accelerating to Zero Transmission of Leprosy in Nepal - ACCELERATE
Pradip Sapkota	Study on Neuropathy and Steroid-induced Bone Mineral Density Loss in Leprosy Patients
Tarkeshwor Mahato	Prevalence of H. pylori infection in Dyspeptic patients
Piyush Jha	Investigating the immunological profile of leprosy and lymphatic filariasis patients from a selected health care centre in Nepal.
Dipesh Tamrakar	Determination of Seroprevalence of Hepatitis A in Nepal
Prajwol Shrestha	Assessing the factors of initial defaulters in TB program in Nepal
Prajwol Shrestha	Evaluation of Sputum courier intervention in TB case-finding in Nepal
Nand Lal Banstola	Breaking the Chains of Stigma: A Study on Reducing Leprosy Stigma and Discrimination in Nepal's Jhapa and Kanchanpur Districts
Shyam Raj Upreti	Pilot study for the deployment of Measles Rapid Diagnostic Test (RDT) in Nepal.
Manisha Hada Shrestha Mank	Primary health care facilities readiness for lymphedema management in Sindhupalchowk district of Nepal: a mixed method study
Pawan Kumar Gupta	Molecular Epidemiology of Hepatitis B Virus Infection in Nepalese Population
Kritika Dixit	Assessment of lived experience of tuberculosis (TB) stigma for people affected by TB in Nepal: A mixed methods study
Priya Jha	Influenza, RSV and SARS-CoV-2 disease in children <5 years with acute respiratory infection in 2023: A retrospective study at National public Health Laboratory, Nepal
Manoj Sigdel	Enablers and Barriers to Engaging Community in National Dengue Control Program in Lalitpur Metropolitan City of Lalitpur District
Shrijana Shrestha	Burden and Risk Assessment of Typhoid (BRAT) Tool Pilot Implementation in Nepal
Abhilasha Karkey	Finding treatments for COVID-19: A phase 2 multi-centre adaptive platform trial to assess antiviral pharmacodynamics in early symptomatic COVID-19 (PLATCOV)

Ganga Marasini	Implementation Challenges and Facilitating Factors of Malaria Screening in Health Desks of Nepal-India Border of Lumbini Province, Nepal
Suraj Bhattarai	Assessment of the prevalence of Melioidosis in Nepal: A prospective cross-sectional pilot study in selected health facilities of two provinces.
Indra Bahadur Napit	Sensory Nerve Transfer To Restore Planter Sensation In Leprosy Neuropathic Feet- A Pilot Study And Health Economic Analysis
Sagar Parajuli	Service Readiness of Primary Healthcare Facilities for Dengue Management in Bagmati Province, Nepal: A Mixed Method Study
Suraj Maharjan	Thermographic Assessment of Autonomic Impairment in Leprosy (TAIL project) in INF Hospitals Pokhara and Banke
Ramesh Timilsina	Assessment of stigma associated with Tuberculosis in Bagmati Province, Nepal
Gokarna Dahal	Evaluation of a novel tool for quality assurance during indoor residual spraying for vector control programmes
Nand Lal Banstola	GIS-based blanket campaigns as a leprosy prevention and active case-finding tool for the interruption of transmission in Achham Nepal
Reshma Tuladhar	Investigating the bacterial etiology of acute diarrhea in children under-5 visiting hospital in Kathmandu and its potential source
Siddha Bahadur Rana Magar	Hypervirulent Klebsiella pneumoniae (hvKp): Prevalence, Detection, Antibiograms and Clinical Outcomes in Comparison to Classical Klebsiella pneumoniae (cKp); A study at a tertiary care center in Nepal.
Suveksha Shaurya Shah	A Retrospective Cross sectional Study on Leprosy Reaction in children from a Leprosy Hospital in Nepal
Birendra Gupta	Characterization of a Novel virus from Pyrexia of Unknown Origin (PUO) patients in Nepal
Sumitra Thapa	A Hospital-based Study on Determination of Azoles Concentration among Biofilm-producing and Non-producing Candida spp. Isolated from the Females suspected of Vulvovaginal Candidiasis
Meghnath Dhimal	Spatio-temporal distribution of dengue in Nepal
Pramod Joshi	Strengthening the capacity for dengue diagnostics and evaluation of the most commonly used commercially available Dengue point-of-care kits in the Southeast Asia Region
Sanjaya Kumar Shrestha	Surveillance for enteric pathogens associated with acute diarrheal disease among local nationals and foreign travellers in Nepal, WRAIR# 3089

Rajendra Maharjan	Phenotypic and Genotypic Analysis of Biofilm Formation in Clinical Strains of Methicillin-Resistant and Methicillin-Sensitive Staphylococcus aureus
Santos Pandey	Exploring social-ecological and biological factors associated with lymphatic filariasis using one health approach in Nepal
Ajaya Basnet	Antimicrobial Susceptibility Pattern of Bacterial Pathogens Isolated from Patients with Orthopaedic Surgical Site Infections
Pramila Aryal	Acceptability of self-care practices among people affected by leprosy in Rupandehi district, Nepal
Shila Shrestha	Comparative In-vitro Efficacy of Fluoroquinolones and Carbapenems amongst Biofilm-forming and Non-forming Non-fermenters Isolated from Clinical Samples
Indra Napit	The Role Of B-Cells And Antibody Production In Immunity During Leprosy And Mycobacterium Leprae Infection: Identifying B Cell Immune Mechanisms For Use In Diagnostics
Ashata Dahal	Case study on the acceptance of a new tuberculosis vaccine in the general public of three TB-affected districts of Nepal.
Kalyan Sapkota	Pre-Exposure Prophylaxis for HIV Prevention (P4HIV): Strategies to implement PrEP for HIV Prevention
Niraj Parajuli	Implantation Mycoses: A Nationwide Survey on Diagnostic and Treatment Modalities in Nepal
Lilee Shrestha	Serotyping of Dengue virus in 2023 dengue cases, Nepal.
Komal Raj Rijal	Molecular epidemiology of acute undifferentiated febrile illness and transmission dynamics of leptospirosis in Nepal
Ram Hari Chapagain	Phase III, randomized, observer-blind, placebo-controlled, multi-centre, multinational study to evaluate the efficacy, immunogenicity, and safety of a Respiratory Syncytial Virus vaccine in infants and toddlers
Suresh Kandel	Knowledge, attitude and preventive practices about Dengue among secondary school students in Dharan, Nepal.
Bikrant Dhakal	Patterns of Skin Diseases among Prisoners in Nepal
Bikrant Dhakal	Knowledge, Attitude and Behavior of Prisoners towards Dermatophytosis in Central Jail of Nepal: Observational Cross-sectional Study
Ajaya Basnet	Antimicrobial Resistance in Bacterial Strains Isolated from Clinical Samples of Patients Visiting a Hospital at Nepal: A Five-year Retrospective Study
Apurba Shrestha	Incidence of Uropathogenic Biofilm Formers Causing Catheter-Associated Urinary Tract Infection in Patients Admitted to a Hospital

Mila Shakya	Characterizing Dengue in Kathmandu, Nepal: A Prospective, Descriptive Study.
Ramanuj Rauniyar	Cocirculation of Arboviral diseases amidst dengue outbreak in Nepal and selective biomarker analysis
Ram Hari Chapagain	Characterization of Biomarkers 2 Years Following Vaccination with Oral Cholera Vaccine: a Prospective Observational Study
Shristy Ojha	Diagnostic evaluation of Mycobacterium tuberculosis by Gene Xpert against microscopy and Rifampicin resistance
Ram Hari Chapagain	A prospective hospital-based surveillance to estimate the burden of Shigellosis in children less than 5 years of age in Nepal
Rudra Prasad Marasini	Analysis of Covid-19 cases in Kathmandu Valley collected through the call centre
Rudra Prasad Marasini	Geo-temporal Analysis of Cholera cases in Kathmandu valley: An outbreak study
Lila Bahadur Basnet	Prevalence and clinical presentations of Post-COVID-19 conditions in Nepal
Prajwol Shrestha	Comparative study of sensitivity for M. tuberculosis between sputum-smear microscopy and TB-LAMP for the initial diagnosis in Nepal
Shrijana Shrestha	Prevalence of seasonal human coronaviruses in UK and Nepalese children

Dentistry

Ayushma Tuladhar	Knowledge and practice of dental doctors on oral candidiasis in Kathmandu Valley
Anita Ojha	Relationship of Dental Caries with Body Mass Index Among Adults at a Tertiary Care Center in Eastern Nepal
Pushkar Manandhar	Morphological variations of sella turcica in orthodontic patients with different skeletal patterns
Seeba Shukla	Mental Health, Job Satisfaction and Associated Factors among Nepalese Dentists
Deepeeka Ghimire	Association of knowledge, attitude and practice regarding oral health and hygiene among twelve years old school students with their oral health status in the Chitwan district of Nepal
Denila Karki	Factors Affecting Dental Caries among School Children in Kathmandu, Nepal

Disabilities

Esther Budha Magar	Access to Disability-inclusive Social Protection among Persons with Disabilities: A Mixed Study from Gurbhakot, Surkhet
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Prakriti Khatri	Validation of the Nepali version of Spinal Cord Independence Measure Self-Report
Rudra Prasadrasini	A case study of the integration of rehabilitation in Nepal's health system
Sijan Shakya	Nepalese Parents' Experiences of their Children's Autism Diagnosis and Insight into their Support Needs
Anil Poudyal	Assistive Technology Capacity Assessment (ATA-C) in Nepal
Niraj Poudyal	Disability-inclusive Outdoor Gyms in Urban Nepal
Rena Shrestha	Adapting and Pre-piloting the Caregiver Skills Training Program for Children with Developmental Delays or Disabilities in Nepal

Drug and vaccine trial

Buddha Basnyat	RECOVERY Trial
Abhilasha Karkey	ADaptive ASsessment of TReatments for influenza: A phase 2 multi-centre adaptive randomised platform trial to assess antiviral pharmacodynamics in early symptomatic influenza infection (AD-ASTRA)
Sasmita Poudel	Adherence and acceptability of multiple micronutrient supplementation among pregnant and lactating women in Nepal: a mixed method study
Bandej Rana	A comparative study on the effect of prophylactic glycopyrrolate on maternal hemodynamics during Cesarean Section under Spinal Anesthesia.
Anjit Phuyal	Low pressure versus standard pressure pneumoperitoneum in laparoscopic nephrectomy: A prospective randomised controlled trial
Mahesh Shah	A single center, open-label pilot study to evaluate the safety and efficacy of cc-11050 (dovramilast) in Nepalese patients with erythema nodosum leprosum (enl): step 2
Dibya Singh Shah	Treatment of cardiovascular disease with low dose Rivaroxaban in Advanced Chronic Kidney Disease (TRACK)
Bhojraj Adhikari	A multi-center, randomized, double-blinded, placebo-controlled Phase III trial to evaluate the efficacy, safety, and immunogenicity of the recombinant SARS-CoV-2 (XBB Variant) protein vaccine (CHO cell) in healthy adults

Emergency, Trauma and Critical Care

Sunil Kumar Joshi	A Cluster Randomized Controlled Trial with Embedded Process Evaluation to Investigate the Clinical and Cost Effectiveness of Multidisciplinary Care in the Management of Patients with a Fracture of the Hip
Mandeep Pathak	Epidemiological Study on trauma prevalence in rural primary hospital setting of Nepal

Sarik Kumar Shrestha	Knowledge, skill and confidence of Nepalese doctors in primary trauma care
Kanchan Thapa	Community Resilience and Disaster Response: Insights from Jajarkot and Rukum West, Nepal for 2023 Earthquake
Samaj Gautam	Social Determinants of Health Affecting Outcomes of Spine Surgeries in a National Trauma Center
Jay Prakash Thakur	Efficacy of pre-emptive caudal epidural analgesia for lumbosacral spine surgery: a prospective observational study in National Trauma center, Nepal.
Mandeep Pathak	Feasibility study of Female Community Health Volunteers (FCHVs) role in trauma case management: A qualitative study
Ishwor Ghimire Padhya	Demographic study of Hip and Knee Arthroplasty in Nepal-2022/23 - A cross-sectional descriptive study
Diptesh Aryal	ICU-related Out of Pocket Expenses (ICOPE) - a multinational prospective study in Nepal
Diptesh Aryal	Clinical characteristics of surgical patients admitted in ICUs of Nepal: A Registry based Cross sectional study
Badri Rijal	A Five Year Study of Spinal Injuries of Patients Presenting to the National Trauma Center of Nepal: An Observational Cross-sectional Study
Badri Rijal	Clinicodemographic profile of patients presenting with Road Traffic Accidents at the National Trauma Center of Nepal: A Retrospective Cross-Sectional Study
Diptesh Aryal	Epidemiology and outcomes of patients hospitalized with Dengue: A prospective international observational cohort study
Niraz Yadav	Needle-phobia in emergency department of rural district hospital in Nepal: A Cross sectional analysis
Sunil Kumar Joshi	Policy and regulation development for motorcycle taxi safety in Nepal
Archana Shrestha	Geospatial Analysis of Injury & Pre-hospital care trends in Central Nepal
Samir Kumar Adhikari	An Assessment of Disaster Preparedness planning in 25 Hub Hospitals of Nepal
Samata Sharma	Clinical characteristics and visual outcome of patients with Ocular Trauma in a tertiary eye hospital, Bhaktapur

Environmental and Occupational Health

Ajay Kumar Rajbhandari Shrestha	Knowledge, Attitude, and Practices regarding pesticide and its usage, health risk perceptions, and occupational exposure to pesticides among farmworkers in Thaha Municipality, Makwanpur
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Samana Sharma	Knowledge, attitude and practice among farmers and stakeholders on the use of pesticide in Chitwan district (Endline Survey)
Meghnath Dhimal	Factors Affecting Childhood Exposures to Urban Particulates in Nepal (FACE-UP): WP7 Evaluation of ethical decision-making frameworks and the co-creation process of informational products regarding urban air pollution
Tara Ballav Adhikari	Understanding barriers to access early warning messages during disasters by individuals with non-communicable disease in Kailali and Kanchanpur District of Western Nepal
Mahesh Chandra Puri	Exploring the linkages between climate-stress, child marriage and poor mental health in Bara district of Nepal – a pilot study
Meghnath Dhimal	Big Data Climate-Health Analyses Across Infectious and Non-Communicable Diseases and Nutritional Disorders in Nepal
Leela Paudel	Use of pesticides and its impact on the Health of Vegetable Farmers in Bhaktapur District, Nepal
Bhupendra Das	Assessment of Vehicular Air Pollutants' Impact on Public Health in Various Hotspots of Kathmandu Valley
Deepa Adhikari	Allergic Rhinitis and Implicated Allergens in Kathmandu
Sailaja Ghimire	Integrated Assessment of Self-Reported Pesticide Toxicity, Farmer's Knowledge and Practices, and Occupational Health Safety: A Dual Perspective Study in Vegetable Farming Communities
Gita Kumari Shah	Occupational Health Conditions and Associated Factors among Sanitation Workers: Knowledge, Attitude and Practice Survey in Nepal.
Sushil Chandra Baral	Assessment of policy context and climate resilient capacity of health system in two municipalities of Nepal
Sailaja Ghimire	Exploring perceptions of people on the effects of climate change in urban communities of the mountain region in Nepal.
Bhupendra Das	Assessment of Brick Kiln's Air Pollutants Impact on Human Health in Industrial Areas of Kathmandu Valley
Meghnath Dhimal	Factors Affecting Childhood Exposures to Urban Particulates (FACE-UP) project: Contextual, policy, governance and ethical factors influencing uptake of exposure reduction practices in Nepal
Dilli Ram Sharma	Study of acute pesticide poisoning among rural farming communities in Koshi and Gandaki provinces of Nepal
Madhab Raj Bist	Noise Induced Hearing Loss Among Workers Of Automobile Workshop In Kathmandu District

Laxman Prasad Shrestha	Reducing silica exposure among brick kiln workers in Nepal: A human-centered design framework to develop a personal protective equipment training intervention
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Essential medical product including pharmaceutical product

Pradip Lamsal	Exploring Equity in Access to Diabetes Medicine: A Health Policy Gap Analysis in Nepal
Sunil Pokharel	Understanding Opportunities and Barriers to Antimicrobial Stewardship in the Federal Health System of Nepal

Gender-based Violence

Dhruba Raj Ghimire	Baseline Study for Empowered Women Prosperous Nepal (EWPN)
Sabitri Sapkota	A randomized controlled trial of a Multi-component family Intervention to Lower depression and Address intimate Partner violence (MILAP) among young women in Nepal
Sajja Singh	A decade of one-stop crisis management centre in Nepal: the barriers and opportunities in post-pandemic and federal Nepal.
Muna Silwal	Knowledge and Understanding of Gender- Based Violence, Mental Health Problems and Access to Services among Men and Women in Gandaki Province.

Geriatric Health

Rekha - Timalisina	Factors Associated with Psychological Wellbeing among Older Adults attending Day-care centres of Kathmandu, Nepal.
Keshab Parajuli	Health and socio-economic status of elderly people in Chandragiri Municipality
Punam Kumari Mandal	Prevalence and Predictors of Tobacco Use among Elderly in Biratnagar: A Community-Based Study
Anup Acharya	The rate and factors causing the abandonment of assistive devices in Nepal: A Cross-sectional study
Bishnu Gurung	Quality of life and its associated factors among the elderly in Manang district
Prabha Shrestha	Challenges in health-seeking behavior among hypertensive older adults
Anushree Acharya	Assessing the malnutrition and depression conditions and their associated risk factors in geriatric people from four provinces in Nepal
Bal Krishna Thapa Magar	Quality of life of older people
Jene Shrestha	A qualitative exploration of dementia care in Dolakha, Nepal

Health Care Delivery System

Diptesh Aryal	Evidence-based QUality Improvement for Prescribing Stewardship in ICU (EQUIPS-ICU): Can a structured antimicrobial review be implemented in LMIC ICUs?
Biplav Shrestha	Accuracy of the Estimated Fetal Weight (EFW) using ultrasonography in pregnancy > 28 weeks done by trained nurses at a primary care hospital in rural Nepal
Pramod Joshi	Assessment of Preparedness of COVID-19 Vaccination at Local Government Level in Nepal
Amit Bhandari	An analysis of COVID-19 vaccine decision-making in the post-pandemic era: A multi-country policy study
Abha Shrestha	Investigating individual, societal, institutional factors influencing women and girls' access to and utilization of prevention and screening for cervical cancer: A qualitative multi-country study within the GLOBE-HPV project
Surendra Kumar Uranw	Feasibility assessment for the introduction of the next-generation freeze-prevention technology in Nepal
Jitendra Kumar Singh	Pattern of Morbidity, Health Seeking Behavior and Fruit and Vegetable Consumption among Adult Population of Outskirt of a Sub-metropolitan City
Suresh Thapa	Quality Indicators of Colonoscopy: Are we meeting the standards in Western Nepal?
Keshab Parajuli	Health and socio-economic status of elderly people in Chandragiri Municipality
Gita Devi Ghimire	Perceptions of Caring Behavior among Undergraduate Nursing Students in Gandaki Province
Kshitij Karki	Analysis of the Implementation Status of Home-Based Records for Maternal, Newborn and Child Health in Nepal: A formative mix-method study
Sushil Chandra Baral	Implementation research to strengthen coordination mechanism and improve the maternal health system in Kapilvastu district.
Sangita Shrestha	Assessment of School health and nursing service program in Nepal: A mixed method study
Ashish Govinda Amatya	TRICS IV: Transfusion Requirements in Younger Patients Undergoing Cardiac Surgery
Sushil Chandra Baral	Peoples Voice survey in Nepal: Tool Validation and Assessment of Service users satisfaction, confidence and trust towards health system
Romi Budhathoki	Attitude, knowledge and practice related to oral health and hygiene among the children age group 10-13 yrs in a private school of Birtamode , Jhapa.

Dipendra Kumar Mandal	Application of lytic bacteriophage against MDR bacterial isolates causing urinary tract infection and molecular characterization of holin and lysin gene responsible for bacterial lysis
Surendra Bikram Basnet	Assessing value-based competition in healthcare services in the Global South context: case of Nepal
Binaya Chalise	Intergenerational Impact of Female Community Health Volunteers: A Pilot Study in Karnali Province.
Sudip Nepal	Fidelity of Implementation of Healthcare Provider-Oriented Care and Support to People with Leprosy for Disability Prevention and Management in Rupandehi District, Nepal: An Implementation Research
Rita Pokhrel	Factors associated with increased Minimum Service Standards (MSS) score in hospitals (Primary and Secondary 'A') and relation of Minimum Service Standards score trend with service utilization
Radha Kumari Shah	Assessment of Orofacial Clefting in Nepal
Meghnath Dhimal	Understanding the Availability and Utilization of Oxygen and its supply system with a focus on Newborns and paediatric oxygen delivery equipment at various levels of health facilities in Nepal: A mixed method study
Yuddha Dhoj Sapkota	Knowledge, Attitude, and Practices (KAP) survey on eye health amongst the population of Simara Municipality, Bara District and Ajirkot Municipality Gorkha district, Nepal
Pranav Shrestha	Pain assessment in a patient undergoing external dacryocystorhinostomy under local anesthesia in a tertiary eye centre
Rudip Thapa	Monitoring, Assessment, and Prevention of Potential Medication Errors in the Tertiary Healthcare Facility of Nepal: A Mixed-Method Study
Rajiv Ranjan Karn	Dynamics of Human Resources in Eye Care Services: A Situational Analysis in Nepal
Naba Raj Bastola	To evaluate knowledge, attitudes, and practices regarding pharmaceutical care among patients with hypertension.
Pramesh Koju	Effectiveness of clinical audit and feedback in improving quality of primary health care: an implementation study
Anurag Singh Thapa	Utilization of Surgical Safety Checklist in a resource-limited hospital in Nepal
Sabitri Bhatta	Spectacle wearing compliance after refractive correction and its barriers among school children of Dhangadhi ,Nepal
Nisha Jha	Development, validation and evaluation of a collaborative educational intervention program on rational antimicrobial use and compliance in selected urban areas of Lalitpur district.

Rupesh Jung Belbase	Study on the efficiency of locking plate surgery with that of inter locking nail treatment in management of proximal humerus fracture in P.T BirtaCity Hospital and Research Center Pvt. Ltd.
Bal Krishna Shrestha	Comparison of post-operative analgesia with intra-incisional injection of tramadol and bupivacaine on Open Hernioplasty for Inguinal hernia.
Shiwani Sah	A study to assess the soft skills among undergraduate nursing students of Madhesh Institute of Health Sciences (MIHS), Janakpur dham, Nepal
Suresh Awasthi	Profile of refractive error after COVID pandemic among school children of Dhangadhi, Nepal
Hrishikesh Bhattarai	Comparison of efficacy and adverse effects of Atracurium and Cisatracurium on patients going for surgery under General Anaesthesia
Steven James Folmar	Caste-Related Barriers to Health Care in Nepal
Sanjib Kumar Sharma	Implementation of the COMMUNITY HEALTh System INNOVATION Project in low- and middle-income countries, COHESION - I
Raba Thapa	Assessment of Accuracy, Feasibility, Acceptability and Cost Implications for Enhancing Access to Refractive Error Services through Technology and task reallocation in Lalitpur and Dhading district in Nepal
Rosan Prasain	Assessment of knowledge and practice on blood transfusion and its association factors among health care workers working at P.T Birta City Hospital and Research Center Pvt. Ltd

Health Economics and Healthcare financing

Prem Prasad Panta	An Econometric Analysis of Health Care Utilization of Palungtar Municipality, Nepal
Yadu Chandra Ghimire	Developing a Data Collection Tool for Capturing Expenditure on Rehabilitation Services in Nepal
Pratik Khanal	Costs and cost-effectiveness analysis of delivering cancer interventions in Nepal.
Archana Amatya	Performance of Curative Service Support Program of the Nick Simons Institute: An Economic Evaluation

Health in altitude Mountain Medicine

Usha Poudel Lamgade	Brain Microstructural Changes Among the Conquerors of the Himalayas, the Sherpas
Ajaya Jang Kunwar	Can Spleen Contraction and Diving Reflex Explain Faster Acclimatization to High Altitude with Repeated Ascents?
Binay Kumar Rauniyar	Impact of Patent Foramen Ovale (PFO) and Atrial Septal Defect (ASD) upon Travel to Extreme Altitude

Santosh Baniya	The Effect of Continuous Positive Pressure Ventilation on Symptoms of Acute Mountain Sickness
Sanjeev Kharel	Cardiovascular Risk Assessment and Pre-existing Health Conditions Among Middle-Aged and Elderly Pilgrims visiting Gosaikunda(4380m)
Sweta Koirala	Hypoxic adaptation and risk factor for health issues in Mustang district

Health Information Technology

Ramesh Kumar Choudhary	Validating the Positive Stigma Inquiry (PSI): A mixed-method study into assessing leprosy-related stigma among community members and healthcare workers in Southern Nepal
Suman Bhatta Paneru	Patient satisfaction with service delivery at Seti Provincial Hospital: A Descriptive Cross-Sectional study
Sweekrity Kanodia	Assessing the impact of a mHealth Intervention (BreMo) on Knowledge of Breast Cancer and evaluating User Experience among Nurses in Nepal
Pukar Chandra Shrestha	10-year Graft Survival of Renal Transplantation- A Single Center Experience of Nepal
Sweta Koirala	Formative research to support a diabetes prevention and management digital application in Nepal
Suben Dhakal	Exploring Attitudes Toward Digital Phenotype Research and Feasibility of Ecological Momentary Assessment to Improve the Health of men who have sex with men in Nepal
Ramesh Bhatta	Integration of the Internet of Things (IoT) based applications in telemedicine with Artificial intelligence in remote health care delivery of Nepal: a pilot study
Subina Manandhar	Effectiveness of Video- assisted Teaching Program on Insulin Therapy among Nursing Students
Sanjay Kumar Thakur	Mapping and Size Estimation of Key Populations in Nepal, 2023
Bijay Khatri	Accuracy of disease prediction models developed by deep learning for screening genetic syndromes in children by utilizing facial features
Shweta Baral	Understanding of disease status, prognosis, and estimated cost of treatment among cancer patients: Experience from a Tertiary Cancer Center in Nepal

Health Workforce

Samjhana Basnet	Enhancing Rural Emergency and Trauma System in Nepal
Agnimshwor Dahal	Knowledge, attitude, and practice (KAP) of antimicrobial prescription, resistance and stewardship among clinical doctors in Nepal: A cross sectional study

Ram Chandra Silwal	Evaluation of the impact of the UK Government's pilot scheme to recruit Nepalese nurses in the UK: a mixed method study
Dikshya Joshi	Title: Exploring the Adequacy of Cardiothoracic Surgeons in Nepal: Insights into factors, motivations and strategies
Abhinav Vaidya	Tackling Antimicrobial Resistance Through Professional Learning: Open Societal Challenge
Runa Jha	Practicing Pathologists' perception about Residency training of Nepal: is it aligned with Practice needs?
Janardan Pathak Pathak	Effects of deploying Anesthesia Assistants (AAs) in enhancing Emergency Surgical Services in Nepal.
Varsha Manandhar	Workplace violence against registered doctors in Nepal: a web-based national study
Nirajan Kadel	MRI study of back and walking muscles of Nepali Mountain porters
Priyanka Pokhrel	Developing a competent senior hospital management workforce in public hospitals in Nepal.
Ravi Ram Shrestha	The Vital Anaesthesia Simulation Training (VAST) Foundation Year for anaesthesia trainees: case study research exploring the influence of context on curriculum delivery
Madhavi Gautam Ghimire	Turnover, Job Satisfaction and Performance of School Nurses in Nepal
Biraj Man Karmacharya	Public Health Competencies in Nepal: Current status and way forward
Tara Jung Gurung	Comparing Grip Strength among Nepali Nursing Students and Nursing staff

Human Genetics

Sanjib Kumar Sharma	Defining the genetic variants contributing to lung function variability and risk of lung disease in Nepalese populations
Sarita Manandhar	Exploring the interplay between gut microbiome and mental health: a metagenomic analysis
Pramod Joshi	Study on Hemoglobinopathies and G6PD Deficiency in Terai Districts of Nepal
Pardip Kumar Oli	Haemoglobinopathies study among tharu of raptisonari rural municipality, banke Nepal
Pratiksha Gyawali	Current Practice and Perspective for Enhancing Genetic Services: An Exploratory mixed-method study at Dhulikhel Hospital

Maternal Health

Shweta Upadhyay	Translation, Cultural Adaptation and Validation of Birth Satisfaction Scale-Revised BSS-R into the Nepalese Language
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Mahesh Kumar Maskey	Reducing MMR and NMR in an Eco-Ethnographically diverse Kapilvastu district of Lumbini Province of Nepal through Community Engaged Digitized Comprehensive Continuum of Care
Pooja Kumari	Facilitators and barriers of exclusive breastfeeding among working women in Kathmandu Metropolitan City: A Qualitative Study
Sandesh Poudel	Global Maternal and Newborn Health Platform Asia-Pacific: Nepal
Laxmi Tamang	Testing and administering the Perinatal Experience Assessment Tool in tertiary level hospital of Nepal
Surya Bhatta	Evaluation of Maternal & Newborn Health Simulation Lab Centers of Excellence in Seven Referral Hospitals of Nepal
Khem Narayan Pokhrel	Endline study of Early Start Project Implemented by Save The Children in Dailekh District of Nepal
Goma Rimal	Prevalence of Teenage pregnancy and its outcomes in Maternal and child health in Lamjung Hospital, Lamjung
Ram Chandra Silwal	Evaluation of respectful maternity care, sexual and reproductive health and comprehensive sexual education in the selected municipalities of Rupandehi, Kapilbastu and Nawalparasi West districts, Nepal: a mixed-method study
Sabitra Subedi	Quality Gap in Maternal Health Services and its satisfaction Provided by Maternity Unit of selected hospitals in Morang District, Nepal
Sajana Maharjan	Implementing and evaluating effectiveness of community level interventions to increase institutional deliveries in Rautahat district of Nepal
Prasant Silwal	Effect of abdominal circumference on spread of intrathecal heavy bupivacaine in parturient undergoing cesarean section: an observational study.
Nagmani Ram	Lack of folic acid supplementation, a risk factor for intrauterine growth restriction (iugr) in patients visiting Sahodar Community Hospital
Suraj Bhattarai	Prevalence of Group B Streptococcus (GBS) colonization in pregnant mothers and their newborns and the seroepidemiology of maternally-derived anti-GBS antibodies: A prospective pilot study in a tertiary maternity hospital of Nepal
Radha Devi Dhakal	Respectful Maternity Care Practices and Associated Factors among Healthcare Providers at Health Institutions in Nepal
Subasna Shrestha (Gurung)	Postnatal care and services utilization in Nepal: use of mHealth intervention in improving utilization of postpartum care
Bishesh Khanal	AI-powered task-shifting for high-quality fetal ultrasound service in community healthcare settings

Kamal Gautam	Sensing Technologies for Maternal Depression Treatment in Low Resource Settings (StandStrong III)
Sandhya Lohani	Exploring the relationship between spousal labor migration and the postpartum experiences of women in Nepal
Biraj Sharma	Cost-effectiveness analysis of helicopter retrieval for women with obstetric emergencies in rural Nepal
Jaya Dhungana	Care Cascade for Pregnancy-Induced Hypertension among women visiting Antenatal Care Clinics in Selected Hospitals of Kathmandu Valley
Bidhya Acharya Adhikari	Decision making practices, changes in dietary intake and food insecurity from pregnancy period, and weight retention at eight months postpartum among women in urban Nepal
Abha Shrestha	Investigating obstacles to hygiene preparedness of maternity services in Kavre district, Nepal
Raj Kumar Pokharel	Endline Assessment of The Project for Mother and Child Health and Nutrition (MCHN) for Koshi and Madhesh Province
Isabel Lawot	Effect of Intermittent Heat & Cold versus Heat only Therapy on Comfort and Duration of Labor among Primigravida
Sajana Maharjan	Maternal and newborn health status and its determinants in Kalikot district: A Baseline study
Aashish Neupane	Comparison of fetal weight by estimating it with Symphysis-fundal height and abdominal girth measurement in different pre-pregnancy body mass indices
Keshar Bahadur Thapa	Male involvement in maternal health care in Nagarjun municipality, Kathmandu, Nepal
Shakti Sharma	Maternal Periodontitis and Adverse Pregnancy Outcomes
Mirak Raj Angdembe	Barriers to completion of a continuum of care for Maternal and Newborn Health services in five districts of Madhesh Pradesh
Suraj BHATTARAI	Antenatal Care Attendance Across Gestational Age Windows in Selected Hospitals of Nepal: An Analysis of Secondary Data

Mental Health

Rita Pokharel Poudel	Antenatal Care Attendance Across Gestational Age Windows in Selected Hospitals of Nepal: An Analysis of Secondary Data
Sanjaya Bahadur Chand	Explore the depressive symptoms and its risk factors in Rural Populations Presenting at Bayalpata Hospital for Counselling
Sabina Sigdel	Impact of Psycho-Educational Intervention on Mental Health Literacy and Attitudes among School Teachers in Godawari Municipality, Lalitpur
Anjali PC	Anxiety, Depression, and Suicidal Ideation among Adolescents of Parbat District: A Cross-Sectional Study
Prabhu Raj Poudyal	A situation assessment of sexualized drug use among HIV key populations in Nepal

Susan Maharjan	Experiences of Academic Stress and Coping Mechanism of Nursing Students- Narrative Inquiry
Rakshya Niroula	Exploring factors affecting Mental Health Service Utilization in Lumbini Province in Nepal: A mixed study approach
Rashmisha Maharjan	Coping Strategy of First Responders of Nepal for Disasters
Deepak C. Bajracharya	Implementation Strategies for Suicide Prevention among Youth in Nepal
Shirish KC	Prevalence of anxiety, depression, and stress among Nepalese doctors who graduated from foreign medical schools
Cemile Ceren Sonmez	Developing a suicide risk assessment tool for Nepali adolescents
Rebecca Makaju Shrestha	Exploring the efficiency of stress management training programs in reducing stress levels within nursing professionals in a tertiary care center in Nepal.
Jitendra Kumar Singh	Stress, burnout, cognition and coping mechanism among medical students of Nepal: A cross sectional study
Ram Chandra Silwal	Feasibility and Acceptability of a Storytelling Intervention to Support Psychosocial Health of Nepalese Migrant Workers
Sudhamsu Gautam	Addressing maternal and geriatric mental health disease burden through collaborative community mental health program
Nagendra Prasad Luitel	Optimizing a community-based intervention to improve help-seeking for depression care in Morang district of Nepal
Nagendra Prasad Luitel	School-based group interventions for preventing adolescents' anxiety and depression in Nepal: a pilot cluster randomized controlled trial
Pralhad Adhikari	Mental Distress in LGBTQ+ people of Nepal: Prevalence, Predictors, and Protective Factors
Samjhana Parajuli	Psychosocial Well-being and Support Needs in Parents of Children with Autism Spectrum Disorder
Sabitri Sapkota	Integrating a suicide prevention package of strategies into decentralized primary health care systems: an implementation pilot study in rural Nepal
Deepika Khadgi	Factors associated with pre-operative anxiety among patients undergoing surgery in a tertiary hospital of Morang
Utkarsh Karki	Clinico Socio- Demographic Profile of Children with Autism Spectrum Disorder from a Mental Health Clinic in Nepal
Jasmine Ma	Global Child and Adolescents Mental Health Study (GCAMHS): Mental health problems among children and adolescents in Nepal
Jasmine Ma	Child and adolescent mental health in Nepal: services, policies and gaps
Tripti Sharma	The relationship between resilience and quality of life in post-myocardial infarction patients: Possible mediational role of perceived social support

Nirmal Lamichhanne	Duration of Abstinence and its Clinical Outcomes in Alcohol Dependent Syndrome in the Gandaki Province of Nepal- A Retrospective Study
Himal Khanal	Perspectives regarding mental health services among health workers at different levels of the health system in Kathmandu Valley, Nepal
Ramesh Nayak	Frequency of depression, anxiety and stress in metabolic syndrome and its correlation with biochemical parameters in Nepalese population
Nirmal Lamichhanne	Exploring Brain Changes through fMRI in the realm of Neuro Art Therapy
Pitambar Koirala	Impact Of Socio Emotional Learning (SEL) intervention among adolescent in public school of Karnali
Nirmal Lamichhanne	Analysis of the Factors for the Relapse of Alcohol Dependent Syndrome in the Gandaki Province of Nepal- A Retrospective Study
Rajiv Ranjan Karn	Effectiveness of Brahma Kumaris Raja Yoga meditation on the quality of life of the person residing in the drug rehabilitation center of Biratnagar
Chandra Bahadur Sunar	Assessment of Quality of Life among the Frontline Health Workers Working in the Selected Government Hospital of Federal Level: A Mixed Method Study
Sandhya Poudel	Intimate Partner Violence and Depression Among Sexual and Gender Minorities in Nepal: The Mediating Role of Perceived Social Support
Deepak Joshi	Codesign of mental health interventions for urban adolescents
Rishika Pokharel	Relationship Between Child Emotional and Behavioral Problems and Parenting Stress: A Cross-Sectional Study in Tertiary-Level Hospitals of Kathmandu
Nagendra Prasad Luitel	Anxiety and depression and their associated factors among adolescents in Kathmandu, Nepal
Pralhad Adhikari	Understanding Suicidality Among Nepali Adults Aged 60 and Older
Ankeeta Manandhar	Exploring the lived experiences of family members caring for persons with mental illness - an interpretative phenomenological analysis
Nagendra Prasad Luitel	Evaluation of adolescents' engagement in mental health research in Kathmandu
Nagendra Prasad Luitel	Perspectives of psychosocial and livelihood experts, adolescents and their caregivers towards interventions' (economic, self-regulation and combined) content and delivery for preventing adolescents' anxiety and depression in Nepal: a mixed-method study
Pratik Adhikari	Tobacco Use and Its Associated Factors among students of Medical College at tertiary care center of Eastern Nepal

Samridha S. J. B. Rana	Exploring Climate and Ecological emotions in Young adults in Nepal and India
Sohan Prasad Pradhanang	A Study on Perceived Biopsychosocial Determinants of Psychotic Illness among Caregivers of Psychotic Patients and Impacts on the Family of Kathmandu District in Nepal
Nagendra Luitel	School-based group interpersonal therapy for adolescents with depression in Nepal: A pilot realist cluster-randomised controlled trial
Poojan Sharma	Factors associated with suicide among community people of two provinces in Nepal

Miscellaneous

Usha Poudel Lamgade	Brain Changes among Buddhist Monks Using Diffusion MRI in Nepal
Sagar Ruit	Knowledge, attitude and practice pattern regarding corneal donation and transplantation in ophthalmic health professionals in Community Eye Centers
Ram Hari Chapagain	Study of knowledge attitude and practices of Child protection among the health care professional of Nepal
Bibisha Baaniya	A cross-sectional study to assess dermoscopic patterns of clinical entities leading to hyperpigmented, hypopigmented and depigmented macules in skin of colour in eastern part of Nepal
Shukra Raj Subedi	Health Status and Expectations of Aging Population: A Case Study of Pokhara Metropolitan City, Gandaki Province, Nepal
Surendra Uranw	Qualitative Assessment of the Cold Chain Equipment Warranty in Nepal
Ajit Khadga	Urological Infection Following Endourological Procedure In Nepalese Population At Tertiary Hospital
Sweta Koirala	Intervention Development for Trafficked Nepali Labor Migrants (ENSURE Nepal)
Nitish Koirala	Prevalence of metabolic syndrome in patients with gallstone disease in the quaternary center of Nepal
Pramod Joshi	Utilization of Health Education Materials on Family Planning, Safe Motherhood and Newborn Care in Nepal
Dev Bandhu Poudel	Academic Value and Control: Predictors of Student Stress, Coping Mechanisms, and Outcomes
Suchitra Thapa	Genomic analysis of antimicrobial resistance in Escherichia coli and Klebsiella pneumoniae from clinical and environmental samples
Deepak Kumar Yadav	Does time in a day alters uroflowmetry: A prospective experience with the population of Nepal
Deepak Kumar Yadav	Urodynamic study in Voiding dysfunction in young adults

Nona Shakya	Technology Readiness in Educational Practice among Nursing Faculties of Tribhuvan University
Prashant Mishra	The Role of Urodynamic Study in the Evaluation of Lower Urinary Tract Dysfunction
Diksha Karki	Estimation of Recurrence Free Survival Using Residual Cancer Burden Class Following Neo Adjuvant Chemotherapy in Breast Carcinoma Patients Visiting Bhaktapur Cancer Hospital
Deepak Ghimire	Rate of myopia progression in the urban setting of Nepal
Salina Shrestha	Assessment of Work from Home Modality: Experiences of Nepalese Employees
Sudesh Pandit	Effect of Internal Migration of Family on their Children's Educational Achievement
Mrigendra Bahadur Thapa	Comparative study of Ropivacaine versus Ropivacaine+Dexmedetomidine combination in transversus abdominis plane block for postoperative pain control in patient undergoing caesarian sections in KIST Medical College and Teaching Hospital
Puja Acharya	Changes in hemodynamics in response to laryngoscopy and endotracheal intubation among Smokers and non-smokers
Neelam Pradhan	Reliability and Validity of a Nepali Language Version of the Work Design Questionnaire
Bibek Aryal	Comparative Study on Cancer Treatment Perspectives: USA, Pakistan, and Nepal
Pooja Pandeya	Effects of Dexamethasone as adjuvant to Ropivacaine in Supraclavicular Brachial Plexus block in upper limb surgeries at KIST Medical College and Teaching Hospital
Ashis Shrestha	General Practice Reformative Agenda 2024
Sundar Adhikari	Opioid Prescribing Patterns in Discharged Patients from a Hospital in Western Nepal: A Prospective Cohort Study
Kiran Kishor Nakarmi	Defining the hazards and epidemiology of fires and burn injuries in slum, urban, and rural communities in Nepal
Prabhu Raj Poudyal	Strengthening Sub-National Health Systems in Urban Poor and Rural Areas to Reach Every Child and Reduce Zero Doses Towards Integrated Primary Health Care in Nepal
Priya Bajgai	Retinal Microvasculature Changes in Acute Anterior Uveitis: Insights from Optical Coherence Tomography Angiography
Johny Bajgai	The Outcomes Assessments of Functional Literacy Education Program on the Livelihoods of Underprivileged Rural Women in Tikapur Nepal
Arun Prasad Dhungana	The ocular morbidity among industrial workers in the grill factories inside Kathmandu Valley

Arun Prasad Dhungana	Profile of Low vision patients attending a low vision clinic of Nepal Eye Hospital
Namita Ghimire, Mohan Raj Sharma	Developing national and global agendas for the ethics of post-trial arrangements in low and middle-income countries during pandemics/epidemics (Pandemic Ethics)
Priyanka Dahal	Intra-operative magnesium sulphate for post-operative pain in patients undergoing total abdominal hysterectomy under general anaesthesia
Sabita Adhikari	Quantitative microbial risk assessment of onsite sanitation systems in developing countries
Sailesh Acharya	Underwater endoscopic ear surgery: a systematic review
Deepak Kumar Yadav	Potential Applications of Low-intensity Extracorporeal ShockWave Therapy (Li-ESWT) in Various Urological Diseases and its Outcome
Khem Singh Saud	Prevalence of Depression, Anxiety, And Stress Among Nepalese Migrant Workers in South Korea
Prinka Singh	Designing Hospital Safety Interventions to Enhance the Hospital Disaster Preparedness Capacity: A Quasi-experimental Study in Public Hospitals of Nepal

Neonatal and child health

Surendra Kumar Uranw	Assessment of the programmatic feasibility and acceptability of Respiratory syncytial virus immunization options in low- and middle-income countries including in Nepal
Sudha Basnet	Understanding the current childhood pneumonia management practices in Nepal
Dirgha Jibi Ghimire	Demonstrating feasibility and identifying the optimal mode for high-frequency child symptom data in the Chitwan Valley Family Study
Amrita Ghimire	Enhancing Growth Monitoring Visits through Health worker Capacity Building and Growth Monitoring and Promotion Day in Joshipur Rural Municipality, Kailali district of Nepal: An Implementation study
Usha Singh	Assessment on gender-related barriers to immunization and broader maternal and child health (MNCH) services uptake in Nepal
Surendra Prasad Awasthi	Prevalence of Neonatal Mortality and Associated Factors in Purchaudi Municipality, Baitadi
Rajeev Shrestha	Understanding the association between viral etiology, immune dysregulations, and environmental factors in the development of chronic lung disease in children in Nepal: Children's Lung Study in Dhulikhel (C -LUNG)
Bhim Gopal Dhoubhadel	Assessment of antibodies against different pneumococcal serotypes covered by pneumococcal vaccines, and comparison of the antibodies in saliva with serum in children

Munawatee Rai	Quality of Life of Parents of Children with Autism Spectrum Disorder
Narayan Mahotra	Physical Activity, Sleep, and Sedentary Behaviour in Nepali Children
Ranjan Dhungana	Adapting a Helping Babies Breathe simulation App to enhance neonatal resuscitation training skills and knowledge retention in Nepal.
Ramesh Prasad Adhikari	Assessing prevalence, determinants, and care and management practices of low-birth-weight babies: A multicentric, observational study in Nepal
Sujata Sakha	Hand hygiene, oral hygiene practice, and health status before and after hygiene education in a sample of primary school children in Pyuthan, Nepal
Bhawana Shrestha	Effect of a mobile health intervention on birth outcome and infant health in a tertiary healthcare facility in Nepal
Sita Karki	Predictors of Child Abuse among School Children and Impact of Structural Training on Child Abuse Among School Teachers of Dhulikhel Municipality
Ashok Pandey	Perception Regarding Sexual and Reproductive Health and Utilization of Sexual and Reproductive Health Services among Adolescents of Suddhodhan Rural Municipality, Rupandehi
Sajal Twanabasu	A Quality Improvement Initiative to Shorten the Duration of Hospital Stay of Preterm/IUGR Babies with Special Focus on Infant and Family Centered Developmental Care.
Janaki Giri	Reliability and Validity of a Nepali Language Version of the Caregiver Knowledge of Child Development Inventory
Santosh Gautam	Evaluation of the parasitic cause of eosinophilia in children in the Pediatric department of Dhulikhel Hospital and its affiliated health facilities.
Sabitri Acharya	Effectiveness of 25% dextrose versus expressed breast milk on vital parameters, pain and comfort level during heel prick among neonates admitted in the Neonatal Intensive Care Unit
Rakshya Dhungana	The study of screening for congenital hypothyroidism in Charikot using cord blood
Khem Pokhrel	Saving Lives of Newborn (SaLiN): A Cluster Randomized Controlled Trial Applying Helping Baby Breathe Simulator Training to Manage Birth Asphyxia in Sarlahi, Madhesh Province of Nepal
Sajal Twanabasu	Timing of Delayed Cord Clamping and It's Correlation With Hyperbilirubinemia: A Hospital-Based Interventional Study
Samata Sharma	Smartphone-based ocular screening among children below five years in province 1 of Nepal; Tele-medicine approach for community
Ranjan Dhungana	Effectiveness of resuscitation training and skill retention program on essential newborn care and neonatal outcomes

Surendra Uranw	Qualitative evaluation of Micron and Vaxxas Microarray Patches (MAPs) for Measles-Rubella (MR) vaccine delivery in 2 provinces, Koshi province and Madhesh province of Nepal.
Bihungum Bista	An Endline Study to assess malnutrition status and effectiveness of moderate acute malnutrition management program in Siraha District, Madhesh Province, Nepal
Rasila Pasakhala	Retrospective Study on Patterns of Antimicrobial Use in the Emergency Department of a Pediatric Hospital
Saraswati Budhathoki Shrestha	The effect, Acceptability and Utilization of Micronutrient powder (Baal vita) in the pediatric population in a Pediatric Hospital in Nepal
Ranjan Dhungana	Assessment of the Helping Babies Breathe and Helping Mothers Survive program in improving birth outcomes in Koshi Province, Nepal.

Nutrition, Food Safety and Security

Gaurav Dangol	Documenting Food Culture in the Indigenous Newar People of Kathmandu Valley through Semi-structured Interviews of Local Food Pre-parers
Sushil Chandra Baral	Exploring the feasibility, acceptability and sustainability of pollinator awareness and stewardship program in Jumla district of Nepal
Suprina Sharma	Bio-control potential of Bacillus species against food contaminating Aspergillus flavus and aflatoxin detoxification
Aashish R Jha	Characterizing the microbial communities and their functions in traditional Nepali fermented foods using a multi-omics approach
Juna Dhungana	Dietary Intake and Nutritional Status of Children with Cancer under Therapy in Bhaktapur Cancer Hospital: A Comparative Cross-Sectional Study between Hematological and Non-Hematological Cancer
Sagun K.C.	Process Evaluation of the implementation of the Transforming Lives through Nutrition project
Upendra Ray	Landscape Analysis of Large-Scale Food Fortification in Nepal
Anjana Neupane	Nutritional status and associated factors among pre-menopausal and post-menopausal women in Urlabari Municipality, Morang Nepal
Manish Gautam	Outcome monitoring of Mother and Child Health and Nutrition (MCHN) Programme in Karnali Province
Shikha Shrestha	A comparative study on dietary pattern and nutritional status of preschool children of working and non-working mothers

Robin Shrestha	Assessment of Nutrition Governance and Food Systems Transformation in Nepal: Application of Nutrition Governance Index (NGI) and Healthy Food Environment Policy Index (Food-EPI) to Assess Multi-Sectoral Capacity, Collaboration, and Policy Implementation
Nikita Shakhakarmi	Understanding Knowledge, Attitudes and Practices of Consumers Towards Nutrition Labels in Kathmandu Valley Visiting Minimarts
Rajan Paudel	Baseline Study of Rice Fortification Project in Nepal
Tulsi Ram Bhandari	Prevalence and Predictors of Overnutrition, Undernutrition, and Anemia in Women of Reproductive Age Living in Rural Nepal: A Cross-Sectional Study
Tulsi Ram Bhandari	Effectiveness of Nutrition Education Intervention for Promoting Health Status of Adolescent Girls in Rural Nepal: A Randomized Controlled Trail
Ruby Manandhar	Factors associated with Nutritional Status among Adolescents of Kathmandu Metropolitan City: A Comparative Study between Public and Private Schools
Bhola Shankar Shrestha	Enhancing Milk Consumption by Vulnerable Household Members in Rural Nepal: a randomized controlled trial
Roshan Basnet	Assessment of Nutritional Status in Government Schools of Rural District of Nepal
Pallavi Vyas Jaisani	Prevalence of Malnutrition in Oral Cancer Patients- A hospital based study in Nepalese subpopulation.
Rupesh Kumar Mishra	Dietary Patterns and Double Burden of Malnutrition in Urban Nepal

Population and Population dynamics

Bhim Prasad Sapkota	Population Connectivity Across Borders (PoPCAB)
Rajeev Banjara	Breakthrough ACTION Nepal Local Systems Strengthening to Reduce Child, Early and Forced Marriage (R-CEFM) Project Survey 2024
Minani Gurung	Patterns and Predictors of Mortality among Nepalese Labor Migrants in Destination Countries
Prajwal Rajbhandari	Genomics, oral microbiome composition, and demography of the Raute hunter-gatherers from Nepal

Sexual & Reproductive Health

Madan Raj Bhatt	Effect of Interpregnancy Intervals on Birth Weights in Nepal
Yagya Bahadur Karki	Impacts of Climate Change on Sexual and Reproductive Health and Rights (SRHR) Among Adolescents and Young People in Dhanusha and Kalikot: A Research Inquiry
Madhusudan Subedi	The SunPad Study

Sushma Rajbanshi	Assessing the quality of family planning services provided by service providers in private healthcare facilities using a mystery client approach
Khem Bahadur Karki	Prevalence of Sexual Dysfunction in Nepal
Sadeep Shrestha	Documentation of findings from a program on free cervical cancer screening with HPV DNA testing using self-sampling in Ward 3 of Lalitpur Metropolitan City, Lalitpur District, Nepal
Dirgha Raj Shrestha	Uptake of modern contraceptive methods after enrolling in comprehensive and tailored Family Planning Rupantaran Package among the selected cohort of Married adolescent girls or their spouses in selected municipalities of 8 districts of Madhesh Province, Nepal
Prabin Shakya	Associations between surgical and medical abortion and post-abortion contraceptive uptake: an analysis from Nepal, Cameroon and Ethiopia
Mahesh Paudel	Participatory Evaluation of MOMENTUM Private Healthcare Delivery Project Using the Most Significant Change Approach
Bhimsen Devkota	Adolescent Experiences of Menstruation and Chhaupadi in Far West Nepal: Leveraging Human-Centered Design and Creative Methods in the Cogeneration of Knowledge
Geeta Sharma	Hub and Spoke Mentorship Model Evaluation
Raj Deb Mahato	The feto-maternal outcome in term pregnancy with premature rupture of membranes
Jeeban Ghimire	Endline Evaluation Study of Comprehensive Community-Based Health Program (CCBHP) in three districts of Nepal
Raj Deb Mahato	Factors Associated with Maternal Mortality at Madhesh Institute of Health Sciences
Amit Timilsina	Sexual and Reproductive health autonomy among ever-married women with disabilities: A qualitative study using grounded theory
Tanuja Kumari Chaudhary	Maternal Satisfaction on Quality of Health Care Service during Child Birth among Postnatal Mothers in a Government Hospital
Archana Shrestha	Health Facility Capacity, Readiness and Factors Influencing Breast and Cervical Cancer Screening in Nepal
Ashok Pandey	Knowledge regarding Unsafe Abortion and Legalization of Abortion among Adolescents in Sarlahi district, Nepal
Sanjay Kumar Thakur	National Level Integrated Biological and Behavioural Surveillance (IBBS) Surveys Among Male Labour Migrants in Nepal
Biraj Sharma	Evaluation of avoidable risk factors for maternal deaths in Nepal using verbal autopsy forms.

Alina Karki	Clinico-epidemiological profile of Sexually Transmitted Infections in Nepal APF Hospital
Deeb Shrestha Dangol	Assessment of the health facility readiness for the provision of quality medical abortion services in basic health facilities in Nepal
Radha Paudel	Dignified Menstruation for Sexual and Reproductive Health and Rights
Raj Deb Mahato	Analysis of caesarean section using Robson ten group classification System at Madhesh Institute of Health Sciences
Bhimsen Devkota	Improving Menstrual Health Among Women and Girls Using Community Engaged Intervention Development in Nepal
Khagendra Raj Bhatta	Clinical Profile of Ectopic Pregnancy at a Tertiary Hospital of Sudur-paschim Province, Nepal
Sunila Shakya	Global Burden Estimate of Human Papillomavirus (GLOBE-HPV)
Mahesh Paudel	Barriers, Motivators, Preferences and Preparedness for Sexual and Reproductive Self-Care Service Delivery among Healthcare Providers in Six Districts of Nepal
Khem Narayan Pokhrel	Study on Sexual Reproductive Health Rights (SRHR) and Abortion among Adolescents in selected districts of Karnali Province Nepal
Latshering Glan Tamang	Integrating Menstrual Health and Sexual and Reproductive Health in the Workplace: An Assessment of Novel Approaches and Impacts in Shikhar Insurance Company Ltd., The Kathmandu Marriott in Naxal, and The Fairfield Marriott in Thamel
Anisha Shrestha	SRH practices and service utilization among women with physical disability from Mugu and Surkhet districts of Karnali province of Nepal: A Qualitative Study
Ramesh Adhikari	Knowledge and Attitude towards Uterine Prolapse and Cervical Cancer among Married women in Madhesh and Koshi Provinces

Universal Health Coverage

Brish Bahadur Shahi	Integrating Rehabilitation Service into Primary Health Care in Karnali Province, Nepal: Challenges and Opportunities
Mandeep Pathak	Implementation and Assessment of facilitation support for improving the coverage of health insurance in Achham
Ganesh Kumar Shrivastav	Healthcare Provider's Experiences and Attitudes towards the National Health Insurance Program of Nepal
Dipendra Kumar Yadav	Improving Routine Immunization through mHealth in Pokhara Metropolitan, Gandaki Province

Urban Health

Sampurna Kakchapati	Assessing Urban Poverty and Deprivation in Nepal: Data Review, Measurement, Visualization, and Capacity Building in Collaboration with Municipalities
Shreeman Sharma	Understanding How Information and Research Evidence are Communicated by News Media to Inform Urban Health Policies and Practices in Nepal
Sandhya Subedi	Comprehensive Assessment of Informal Settlements in Bagmati Corridor of Kathmandu Valley
Rubee Awale	Burden of Anemia among children between 6 months to 59 months in a 1 year period in the urban hospital of Sudurpaschim Nepal
Sabin Dotel	The Potential of urban Nature-based Solutions to Improve Public Health Outcomes Through Reduced Vector and water borne disease: The Case of Bharatpur Metropolitan City
Bishnu Prasad Chaulagai	A Comprehensive Assessment of Self-Reported Disease Status and its Associated Factors among Residents of Kathmandu Metropolitan City
Abriti Arjyal	Ethnographic Study of Intersecting Inequities Experienced by Urban Poor in Kathmandu, Nepal

Zoonotic Disease (Including Snakebite)

Dibesh Karmacharya	Zoonotic Disease Surveillance in Selected Regions of Chitwan National Park and its Buffer Zones
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Non-Communicable Disease

Tara Ballav Adhikari	Developing a Non-Communicable Diseases Care Package for Disaster-Prone Areas of Western Nepal: A Mixed-Methods Study
Kunjang Sherpa	Effectiveness of an integrated program for the prevention of rheumatic heart disease in endemic regions: an incomplete stepped wedge cluster randomized trial
Deependra Singh	Prospective cohort study to assess the delays and barriers to access diagnostic and treatment services for childhood cancer patients and their impact on quality of life in Nepal
Birendra Kumar Jha	Assessment of daily salt intake and its association with cardiovascular and kidney diseases in patients of tertiary care center of Madhesh Province, Nepal
Bhawana Bhandari	Lifestyle Related Health Risk Factors regarding Non-communicable Diseases among Adults of Municipality of Bhaktapur District, Nepal

Ishwor Ghimire Padhya	Does intraarticular use of tranexamic acid reduces blood loss after primary total knee arthroplasty; A prospective comparative cohort study
Kalpana Kumari Shrestha	Percutaneous Continuous Ambulatory Peritoneal Dialysis Catheter insertion by Nephrologists in Shahid Dharmabhakta National Transplant Center
Mamta Dhakal	Kidney Dialysis Service: Experiences of Consumer and Provider and Quality of Life of End Stage Kidney Disease Patients in Parbat, Nepal
Tirtharaj Acharya	Assessing Adolescent Awareness, Attitudes, and Behaviors Regarding Non-Communicable Disease (NCD) Prevention in Pokhara, Nepal: Implications for Tailoring the PEN Package Program
Himal Thapa	Status of Helicobacter pylori and Tumor Markers in Gastrointestinal Associated Cancer
Sushant Sah Shubham	Workplace violence and its associated factors among health care workers of a tertiary hospital
Kiran Shakya	Identification of risk factors for sight threatening diabetic retinopathy patient in a tertiary eye hospital
Tarkeshwor Mahato	Endoscopic findings of patient presenting with upper GI Bleed in a tertiary care centre of Madhesh Province
Sumit Acharya	Iron deficiency anemia among kidney transplant patients
Gehanath Baral	Risk Factors of Breast Cancer in Nepal
Suvekshya Silwal	Knowledge and Attitude Regarding Self-Administration of Insulin Injection among Diabetic Patients of Morang
Digbijay Kumar Thakur	Bad prognostic factors in patients with exacerbation of chronic obstructive pulmonary disease
Reeta Gurung	Comparison of Collagen Cross-linking as Adjunct Treatment for Infectious Corneal Ulcer with medication at a tertiary eye hospital in Nepal
Pratikshya Amatya	Profile of eyelid tumours: Histopathological examination and relative frequency at a tertiary centre in central Nepal
Bharat Kafle	Effectiveness of Community Health Workers Induced Prevention of Breast Cancer by Community Health Promotion and Education Implementation Strategies in Jumla
Anchala Sapkota	Satisfaction and Adherence to Inhaler Devices Among Patients with Chronic Obstructive Pulmonary Disease (COPD) in a Tertiary Care Hospital of Western Nepal
Punam Kumari Mandal	Barriers and facilitators for engagement of Community Health Workers in Prevention and Control of Non-Communicable diseases, Morang, Nepal

Pramodman Singh Yadav	Investigating Sleep Quality and Associated Outcomes in Undergraduate Medical Students: A Cross-Sectional Analysis in Eastern Nepal
Anil Shrestha	Assessing flexible ureteroscopy (FURS) outcomes for lower pole stones using the Flexible and navigable suction ureteric access sheath (FANS). A multicentre study by EAU Section of Urolithiasis(EULIS) and the global FANS collaborative group
Ramila Shilpakar	A Pilot Study on the Evaluation of Genetic Predisposition to Breast, Ovarian and Prostate Cancer in South Asia
Deepika Khadgi	Health Literacy on Chronic Kidney Disease among Adults of Morang, Eastern Nepal
Shivaom Chaurasia	Risk factors and association of colorectal polyps with type II diabetes mellitus in quaternary center of Nepal
Milan Maharjan	Prevalence of cholesteatoma in school going children of nepal
Anita - Gurung	Knowledge, Attitude, and Preventive Practices on Cardiovascular Diseases among the selected Community People of Gorkha
Ananda Bahadur Chand	Assessing the effectiveness of 90 percent pictorial health warning in Nepal-2024
Simit Sapkota	Treatment outcomes of CT-guided percutaneous high-dose-rate brachyablation in lung cancer: A retrospective analysis
Sameer Mani Dixit	Assessment of circulating levels of HABP2, TNC, and SERPINA3 in Nepalese Behcet's disease: A Case-Control Study
Gyanu Maharjan	Assessment of Prostate Cancer Awareness and Screening Initiatives in Middle adulthood at Selected Wards of Tarkeshwar and Tokha Municipality, Nepal
Srijana Khadka	Spatiotemporal Distribution of Lung Cancer in Nepal
Abish Adhikari	Assessment of antibiotic susceptibility patterns in urinary tract Infection among Cancer Patients in a Tertiary Cancer Hospital in Nepal
Jot Narayan Patel	Factors associated with cancer at Mahalaxmi Municipality: A case-control study
Bindu Malla	Impact of patient counseling on clinical outcome in type II diabetes mellitus patients
Deepak Yadav	Treatment outcomes in hypopharyngeal cancer treated at a tertiary cancer center in Nepal: A retrospective analysis
Durga Datta Chapagain	Factors associated with Non-Communicable Diseases Among Government Employees Working in Makwanpur District of Nepal: A Cross-Sectional Study
Deepak Yadav	Treatment outcomes in laryngeal cancer treated at a tertiary cancer center in Nepal: A retrospective analysis

Chiranjivi Adhikari	Validating Non-lab Cardiovascular Risk Scoring Algorithms and Exploring the Emergent CVD Risk Factors in Pokhara, Nepal: Cross-Sectional Study
Bijaya Chandra Acharya	Application and Demonstration of Chinese HPV Vaccine and Cervical Cancer Screening Technology in Low-Resource Countries
Lata Kusum Shah	Assessment of knowledge, attitude and practices among the healthcare workers regarding dengue at selected hospitals, Mahesh province, Nepal
Gyan Bahadur Basnet	Comparison of Motion Coherence Threshold in Infantile Nystagmus Syndrome and Normal Age-matched Controls Visiting Tertiary Eye Care Center
Shreeti Kafle	Health-seeking behaviours and Healthcare Service Utilization for skin Conditions among adults in Kathmandu: A Cross-Sectional Study
Krishna Chandra Adhikari	Pattern of cardiovascular diseases in Sudurpaschim Province according to Echocardiography findings
Prava Bajgain	Barriers delaying access to cancer care among patients in Nepal Cancer Hospital
Subarna Sharma	A cross-sectional study on Knowledge, Attitude, and Practices (KAP) on Non- Communicable Diseases (NCDs) in the Bagmati Province of Nepal
Sapana Ghimire	Thyroid status in patients with chronic kidney disease visiting transplant center of Nepal.
Kalpna Kumari Shrestha	Analysis of Five-Year Kidney Transplant Recipient and Graft Survival Rates: A Retrospective Study of Renal Transplant Patients at a Transplant Center.
Yashashwi Pokharel	Translation and Evaluation of Dose-Nonadherence Measure in Nepali Language
Ram Kumar Sitoula	A pattern of non-communicable disease and their clinical outcome among medical admission at the provincial hospital, Bhadrapur Jhapa
Jyotsna Shakya	Low-Density Lipoprotein related Candidate Gene Polymorphism in coronary artery disease and their Interplay with Modifiable Risk Factors in Nepalese Population: A Case-Control study
Subina Manandhar	Effect of video-based health education intervention on Insulin Therapy among adults with Diabetes Mellitus in Dhulikhel Hospital: A Randomized Controlled Trial
Rishika Tiwari	A Comparative Study of Knowledge, Attitudes, and Lifestyles among Hypertensive and Non-Hypertensive Patients at Koshi Hospital, Biratnagar, Nepal

Subhas Pandit	Breaking Barriers: Supporting Hematopoietic Stem Cell Transplant Program through Collaborative Radiation Therapy Service from a Physically Distant Center
Rajan Shrestha	Community-based promotion of physical activity in a semi-urban area of Pokhara Metropolitan City, Nepal: a cluster-randomized controlled trial
Srijana Pradhan	Self-Care Management and Perceived Self-Efficacy among Diabetic Patients in a Private Hospital in Kathmandu
Narayan Gautam	Biochemical, Molecular, and Quality of Life Characterization in β -Thalassemia Patients and its Association with Chronic Liver Disease Among Tharu Population in Lumbini Province, Nepal
Sundar Dhungana	Incidence of Hearing Loss in patients visiting ENT OPD of a tertiary hospital in Kathmandu
Sudha Ranabhat	Dry Eye Disease in Type II Diabetes and its Association with Antidiabetic Medication
Raba Thapa	Development of Diabetic Retinopathy Registry in Nepal.
Gayatri Kumari Paudyal	Factors predicting self-management behavior in caregivers of patients with chronic obstructive pulmonary disease in Nepal
Shyam Vyas	Assessment of productivity, costs and environmental impact of phacoemulsification and small incision cataract surgery at a tertiary eye care center in Nepal: using the 'Efficiency' cataract surgical services auditing tool
Shova Acharya	Factors Related to Medication Adherence Among Persons with Hypertension in the Federal Democratic Republic of Nepal
Rishi Bhatta	Cross-sectional study on prevalence and causes of hearing impairments in Salyan and Surkhet districts of Karnali Province, Nepal.
Rupesh Kumar Yadav	Clinical Outcome for Knee Osteoarthritis Patients Following Platelet-Rich Plasma Injection - A Retrospective Study
Subhas Pandit	Low Dose Nivolumab in Cancer Treatment: Addressing Financial Toxicity
Purushottam Sah	Normative Values of Standard Full Field Electroretinography in a Nepalese Population
Pukar Chandra Shrestha	Renal Transplantation among Returnee Migrant Workers and the Determinants of Health: A Single Center Study at a Transplant Center
Umash Karki	Correlation of Spinopelvic parameters in lumbar prolapsed disc in Armed Police personnel
Govinda Mani Nepal	Development of an exercise protocol and recommendations for mobile applications for home-based stroke rehabilitation in Nepal

Shankha Narayan Twyana	The Impact of Successful Corneal Transplantation Surgery on Quality of Life in Nepal
Rupesh Kumar Yadav	A Retrospective Analysis of clinical outcome for lumbar disc herniation treatment with intradiscal oxygen-Ozone therapy
Prabodh Regmi	Clinico-demographic Characteristics and Outcome of Patients with Renal Colic, A Prospective Study
Bonita Sharma	Effect of school-based health education program on behavioral risk factors of non-communicable diseases among school-going adolescents in Kageshwori- Manahara Municipality of Nepal
Rajan Paudel	Assessment of Serum Creatinine and Lipid Profile in Diabetic Patients with or without Thyroid Dysfunction
Poonam Shrestha	Clinical profile, associated risk factors and topographic characteristics of keratoconus patients attending tertiary eye hospital
Rekha Manandhar	Human Leucocyte Antigen Distribution in Renal Transplant Recipients and Donors Visiting Department of Histocompatibility and Immunopathology at National Public Health Laboratory, Kathmandu, Nepal
Mahesh Shahi	Bacteriologic Profile and Antibiotic Susceptibility of Bacterial Pathogens in UTI Patients at Bayalpata Hospital, Achham
Kalpana Bhattarai	Outcome of Cervical Cancer Screening: A Record Review from National Cancer Care Foundation, Talchikhel, Lalitpur, Nepal.
Mamata Maharjan	Prevalence of Musculoskeletal Disorders and Associated Risks Factors among the Cooperative Staff in Kirtipur Municipality of Kathmandu District
Anjan Rijal	Burden of Lower Urinary Tract Symptoms among adults with Type 2 Diabetes Mellitus in Nepal
Dinesh Neupane	Understanding the Influence of Social Support on Antihypertensive Medication Adherence in Urban Nepalese Communities
Mukesh Pandey	Assessment of prevalence of dental caries and its associated risk factors in diabetic patients in a tertiary care centre of Nepal.
Archana Shrestha	Community Health Worker Led Hypertension Prevention and Control (CHPC) in Nepal: An Implementation Trial
Puja Rajbhandari	Hospital-based National Thyroid Eye Disease Registry
Biraj Man Karmacharya	Using Time Driven Activity Based Costing for Defining and Integrating Essential Non-Communicable Diseases Interventions in Nepal
Punyaram Kharbuja	Feasibility, Complications and Oncologic results in radical groin node dissection: A Comparative Study Between Standard lazy 'S' incision and skin bridge incision

Archana Shrestha	Perceptions of integration of Ayurvedic medicine for cardiovascular disease prevention: A qualitative study
Sangita Karki Kunwor	Use of Herbal Medicines among Women Diagnosed with Breast Cancer: A Cross-Sectional Study conducted in B.P Koirala Memorial Cancer Hospital and Purbanchal Cancer Hospital of Nepal
Birendra Kumar Jha	Assessment of Metabolic Syndrome and its associated risk factors in Type 2 Diabetes Mellitus: A multi-centric cross-sectional study at Madhesh province, Nepal
Hari Prasad Bhusal	Effectiveness of Community-Based Counseling for Medication and Lifestyle Behaviour Modification on Treatment Adherence to Control Hypertension among the Adult Population in Bharatpur Metropolitan City, Chitwan, Nepal: A Quasi-experimental Study
Utsab Man Shrestha	Breast-Conserving Surgery: An Overview at a Tertiary Cancer Centre
Abhinav Vaidya	An Integrated, technology-enabled, patient-centered, health system intervention to improve the care for people with Multiple Long-Term Conditions in Bhaktapur and Kavre districts of Nepal
Sadiksha Karki	Treatment Adherence among Renal Transplant Recipients Receiving Immunosuppressive Therapy attending in Referral Hospitals
Utsab Man Shrestha	Comparative Study of Breast Conserving Surgery and Modified Radical Mastectomy in Patients with Breast Cancer at a Tertiary Cancer Centre
Neema Hitang	Knowledge, Attitude and Practices of Diabetic Patients towards Prevention and Early Detection of Chronic Kidney Disease in Government Hospital, Baglung
Mohan Krishna Shrestha	Assessment of implementation, efficiency and sustainability of the School Eye Health Program implemented by Tilganga Institute of Ophthalmology and its partners in Nepal: mixed method
Ajaya Raj Gautam	Clinical Profile of Chronic Kidney Disease Patients Under Hemodialysis at a Tertiary Care Hospital, Dang
Tirtha Lal Upadhyaya	Assessing health-related quality of life in COPD patient: A multicenter study
Krishna Subedi	Dental caries prevalence and oral hygiene practices in a sample of school-going children of Nepal
Sunila Shakya	Cervical Cancer Prevention Program in Rural Nepal: Expanding reach through Community Health Workers-An implementation pilot study
Jaya Kumar Gurung	A Nationally Representative Study on Socioeconomic and Policy Aspects of Tobacco Use in Nepal, 2023

Punyaram Kharbuja	Long-term Outcome of Abdominal Tuberculosis on Gastrointestinal Cancer in a Tertiary Cancer Centre: A Retrospective Study
Prasansha Shrestha	Prevalence and associated factors of hypertension with anxiety and depression among adults residing in rural areas of Sindhupalchowk District in Nepal: a cross-sectional study

Ongoing studies for Monitoring Visit for different districts

Mr. Bhagawan Shrestha	Assessment of the Scale, Reach, Quality, and Cost of Service Delivery High Impact Practices in Family Planning in Mozambique, Uganda, and Nepal
Dr. Dirgha Jibi Ghimire	Impact Evaluation of Parental Education Program on Children's Early Childhood Development Outcomes Study, Gajuri, Dhading
Mr. Chiranjivi Adhikari	Validating Non-lab Cardiovascular Risk Scoring Algorithms and Exploring the Emergent CVD Risk Factors in Pokhara, Nepal: Cross-Sectional Study
Mr. Rajan Shrestha	Community-based promotion of physical activity in a semi-urban area of Pokhara Metropolitan City, Nepal: a cluster-randomized controlled trial
Ms. Gita Kumari Shah	Occupational Health Conditions and Associated Factors among Sanitation Workers: Knowledge, Attitude and Practice Survey in Nepal
Dr. Sweta Koirala	Work in heat and health - a toolbox for occupational studies in manual workers in LMIC countries
Dr. Sweta Koirala	Occupational heat exposure among migrant workers attending kidney dialysis centers in Nepal
Dr. Sanjaya Shrestha	Sentinel Human Surveillance for Influenza in Asia - Nepal (Site Specific Annex) WRAIR# 1795C (Version 6.0 dated 30 April 2020)
Dr. Dirgha Jibi Ghimire	Youth Health and Stress Study in Chitwan Nepal
Dr. Dirgha Jibi Ghimire	International Labor Migration, Armed Conflict and Alzheimer Disease and related Dementia Risk in Chitwan, Nepal
Dr. Kalyan Sapkota	Emetine for Viral Outbreaks: Randomized, Double-Blind, Placebo-Controlled, Clinical Trial to Evaluate Oral Emetine Against CoVid-19 (EVOLVE)
Dr. Kalyan Sapkota	Pre-Exposure Prophylaxis for HIV Prevention (P4HIV): Strategies to implement PrEP for HIV Prevention

Dr. Bhojraj Adhikari	A multi-center, randomized, double-blinded, placebo-controlled Phase III trial to evaluate the efficacy, safety, and immunogenicity of the recombinant SARS-CoV-2 (XBB Variant) protein vaccine (CHO cell) in healthy adults
Dr. Sabjib Kumar Shrama	A 2x2 factorial randomized controlled trial of Colchicine and spironolactone in patients with myocardial infarction / SYNERGY Stent Registry - Organization to Assess Strategies for Ischemic Syndromes 9 (CLEAR SYNERGY - OASIS 9)
Dr. Krishna Prasad Subedi	National Burden of Cancer and its Medical & Astrological Perspective
Dr. Dhruva Raj Ghimire	Baseline Study for Empowered Women Prosperous Nepal (EWPN)
Dr. Sanjib Kumar Sharma	Global Congestive Heart Failure (G-CHF): A global registry to study the demographics, socioeconomic and clinical factors, etiologies, pathophysiology, management, barriers to care, and outcomes of heart failure patients
Dr. Buddha Basnyat	Azithromycin and cefixime combination versus azithromycin alone for the out-patient treatment of clinically suspected or confirmed uncomplicated typhoid fever in South Asia; a randomised controlled trial
Dr. Sanjib Kumar Sharma	Implementation of the COMMUNITY HEALTH SYSTEM INNOVATION Project in low- and middle- income countries, COHESION - I
Dr. Abhilasha Karkey	A Clinically-Oriented Antimicrobial Resistance Surveillance
Dr. Sanjib Kumar Sharma	Edoxaban for Intracranial Hemorrhage Survivors with Atrial Fibrillation (ENRICH-AF)
Dr. Abhilasha Karkey	A Clinically-Oriented Antimicrobial Resistance Surveillance Network for Healthcare-associated infections (ACORN-HAI)
Dr. Diptesh Aryal	Clinical characteristics of surgical patients admitted in ICUs of Nepal: A Registry based Cross sectional study
Dr. Indra Bahadur Napit	Comparison of removable off-loading device and routine care to heal plantar ulcers due to leprosy and diabetes in the community: a feasibility plus trial
Dr. Diptesh Aryal	The Mega Randomised Registry Trial Comparing Conservative vs. Liberal OXYgenation Targets
Dr. Soniya Dulal	Clinical and molecular characterization of breast cancer in women presenting to Medical Oncology unit at B. P. Koirala Institute of Health Sciences - A hospital based study
Dr. Surendra Uranw	Qualitative evaluation of Micron and Vaxxas Microarray Patches (MAPs) for Measles-Rubella (MR) vaccine delivery in 2 provinces, Koshi province and Madhesh province of Nepal

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