Final Report

28th July 2024

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Introduction

ANMF was established in 1997 by a group of Nepalese and American doctors who loved Nepal. The first meeting and conference was held in Boston with a theme of "Strengthening Nepal's Medical Capabilities". It was attended by approximately 40 participants.

Aligned with this theme, the speakers highlighted need for enhancing the technical skills of doctors working in the remote district hospitals of Nepal, enabling Nepalese physicians for harnessing potential of telemedicine, establishing Radiation Therapy Center on the premise of Tribhuvan University Teaching Hospital (TUTH), and institutionalizing the transfer of medical expertise to help improve Nepal's health situation. The participants put forth recommendation for activities, which include following:

1. Continue to procure and send medical learning resource materials to the medical school library in TUTH
2. Organize a Continuting Medical Education (CME) program including speakers from USA and possibly Canada
3. Explore the opportunities for, and facilitate the training of, Nepalese professionals in North America in areas that are considered a priority need for Nepal
4. Support for or collaborate with the medical projects that are directed towards the strengthening medical capabilities of Nepal including telemedicine

Following its establishment, ANMF contributed to (a) enhancing the capacity of Kathmandu University Medical School (KUMS) and Nick Simons Institute (NSI); (b) organizing a successful health camp to address uterine prolapse at GauriShankar Hospital in Dolakha, a measure later adopted as a priority preventive action by the Government of Nepal (GoN); (c) facilitating the establishment of Bayalpata Hospital in Achham by providing initial funding to Nyaya Health; (d) supporting the development of pediatric intensive care units and neonatal care units in Patan Hospital through logistical assistance and seed funding. During its initial phase, ANMF provided assistance to numerous additional projects (see Annex 1).

In response to a devastating earthquake in Nepal, ANMF significantly increased its efforts and received funds from numerous donors to support the GoN's earthquake relief initiatives. ANMF provided relief materials to over 168 municipalities, constructed healthcare facilities in more than 15 municipalities, and distributed funds to various other organizations undertaking relief activities. ANMF was also actively involved in mitigating the impact of COVID-19 in Nepal. Over the years, the organization has supported multiple tertiary hospitals by funding the construction of oxygen plants, enhancing healthcare capacity through fellowships for professionals, providing funds for medical equipment, training nurses for improved patient care in intensive care units, supporting healthcare research, and other similar initiatives.

Since its establishment, ANMF has provided funds to implement more than 200 projects mainly including capacity building, infrastructural support, research, community awareness, disaster relief and rehabilitation. However, it is yet to be assessed the extent to which ANMF's funding was able to promote the advancement of medical training and practice in Nepal[1]. Even though, there are project reports,

[1] The mission of ANMF is to promote the advancement of medical training and practice in Nepal. The foundation is committed to supporting the Nepali people's ongoing efforts to enhance their health status. Thus, ANMF will

updates, and acknowledgement received from institutions funded by ANMF which shows ANMF's contribution, a credible evidence-based report to analyze the extent to which ANMF's funding were aligned with ANMF's mission is crucial for the foundation in days to come to make an informed decision for efficient mobilization of their funds.

Taking above rationale into consideration, this study had following objectives:

1. To evaluate the alignment of ANMF funded projects with ANMF's mission
2. To assess ANMF's support in advancing healthcare in Nepal
3. To make evidence-based recommendation for efficient allocation of ANMF's resources in line with ANMF's mission

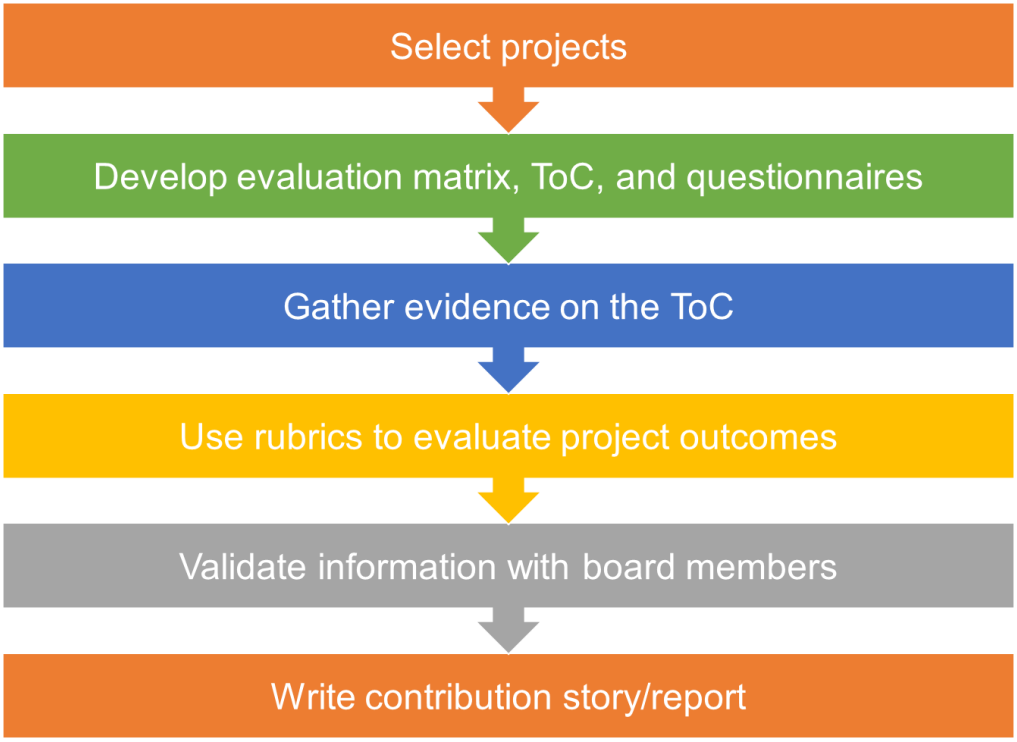
focus on improving the quality of medical care, medical education and medical research in Nepal as mentioned in its mission and vision statement. For more information on ANMF's objectives, please refer to Annex 2.

Approach and Method

This study employed Contribution Analysis (CA) as an analytical approach for assessing the extent to which ANMF funded projects' results can be attributed to the project's activities rather than external factors. CA facilitates the exploration of cause-and-effect relationships between activities and outcomes, providing a means to make credible claims about the intervention's contribution based on the theory of change (TOC)[2]. This systematic approach enables evaluation to unpack impact by explicitly examining multiple actors and influences, offering insights into what worked and why.

Figure below illustrates the step wise process undertaken to conduct this study.

Figure 1: Step-wise methods for conducting the evaluation



1. Select projects: To determine the projects for evaluation, three specific categories were created: 1) Health infrastructure enhancement; 2) Capacity Building in Healthcare; 3) Preventive Health Initiatives. Two projects were selected from each category for detailed evaluation, as outlined in the Annex 3 with brief descriptions.

2. Develop evaluation matrix, ToC, and questionnaires:

    a) An **evaluation matrix** (see table below) was developed as the overarching tool to guide the evaluation process. It focused on key criteria, such as observed results, the contribution of the intervention to those results, potential influencing factors, sustainability, lessons learned, and the likely future impact.

[2] "ToC is a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context" - Centre for Theory of Change

Table 1: Evaluation matrix

Criteria	Questions
Results	*What have been the observed results of the project?*
Contribution to results	*Did the intervention make a difference i.e., play a role in bringing about the observed results? In particular, how and why has the intervention made a contribution? What factors are needed for the intervention to make a contribution?*
Other influences	*What other influencing factors were at play?*
Sustainability	*Are the results achieved sustainable?*
Lessons	*What lessons on bringing about long-term change can be learned for future programme implementation?*
Likely future impact	*Is it likely the intervention will make a contribution to results in the future?*

b) **ToCs** (see Annex 4 below) for each selected project were developed aligning with the evaluation matrix. Each ToC delineates the key activity implemented by the project, articulates assumptions crucial for achieving desired outcomes, identifies key outcomes expected when activities align with assumptions, and concludes with the overarching impact of advancing healthcare in Nepal. This process allowed for a systematic understanding of the project's logic, illustrating the causal pathways between inputs, activities, outcomes, and impact. By explicitly stating assumptions and linking them to key activities and outcomes, the ToCs served as a roadmap for evaluating the project's effectiveness.

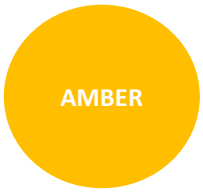
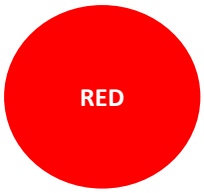
c) In alignment with the ToCs, both **qualitative and quantitative questionnaires** were developed (see Annex 5 below). These questionnaires were used as the primary instruments for data collection, complementing the information gathered from project reports.

3. Gather evidence on the ToC: Utilizing the questionnaires, evidence was collected from the key informants[3] who actively participated in the implementation of the selected projects.

4. Use rubrics[4] to evaluate project outcomes based on evidence: Following rubric was developed and used to evaluate project outcomes. This helped in systematically evaluating and categorizing the effectiveness of the ANMF's interventions based on evidence across evaluation matrix.

[3] Key informants will be identified in consultation with ANMF.

[4] A rubric is a framework that sets out criteria and standards for different levels of performance and describes what performance would look like at each level. Please refer to Better Evaluation webpage for further information.

	Strong achievement across all questions set out in the evaluation matrix. Stands out as an area of good practice where ANMF is making a significant positive contribution in advancing healthcare in Nepal.
	Satisfactory achievement in most areas but partial achievement in others with room for improvement. An area where ANMF is contributing to advancing healthcare in Nepal but where improvements are required to achieve the GREEN status.
	Poor achievement across most areas. An area where ANMF is failing to make a long-lasting positive contribution in regard to advancing healthcare in Nepal. An area where ANMF should carefully consider before funding.

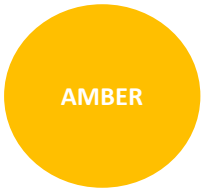
5. Validate information with board members: Following the initial analysis, the gathered information will undergo validation with ANMF board members. This process will also provide an opportunity to verify whether the current vision articulated by the present ANMF president aligns with the perspectives of past presidents. Additionally, it offers an opportunity to evaluate if the current ANMF president and board members share a consistent understanding of ANMF's mission and objectives as envisioned by the organization's founding members.

6. Write a contribution story/report: A preliminary report was developed and shared with ANMF for feedback and comments. Subsequently, after integrating any feedback or comments received, the final report will be submitted to ANMF.

Findings

Health Infrastructure Enhancement

Health Post Rebuilding Project



Satisfactory achievement in most areas but partial achievement in others with room for improvement. An area where ANMF is contributing to advancing healthcare in Nepal but where improvements are required to achieve the GREEN status.

Brief description of submitted proposal against the report provided after completion of the project

Proposal	Report
ANMF received several proposals for health post rebuilding project including from: • ANMF Nepal: for construction of 13 prefabricated health posts/hospital across Sindhupalchowk district and one concrete community health care center at Chauthe, Nuwakot district. • Possible/Nyaya Health: for construction of prefabricated health posts across Sindhupalchowk and Dolakha districts. • Tarkang Community Health Centre: for construction of one concrete community health center at Tarkang, Kaski district. • Lions Club (Narchyang): for construction of concrete community health center at Narchyang, Myagdi district. The total estimated budget is approximately USD 600,000.	ANMF received reports from ANMF Nepal, Nyaya Health, Tarkang and Narchyang Community Health Centre. However, a detailed report reflecting on challenges faced during construction and possible opportunities for strengthening those health facilities could have provided avenues for further advancing health care in Nepal (specifically for ANMF).

Results: What have been the observed results of the project?

After the devastating earthquake in Nepal, ANMF, in collaboration with the Ministry of Health and Population, aimed to rebuild healthcare infrastructure, constructing several healthcare centers, including 12 prefabricated health posts and Chautara Hospital in Sindhupalchowk district. ANMF also helped to construct other health posts in Dolakha, Nuwakot, Kaski, and Myagdi districts by funding other not-for-profit organizations. These efforts aimed to restore and enhance healthcare services in areas where facilities were destroyed or insufficient.

The results have been mixed. In Sindhupalchowk, health posts like Attarpur are fully operational, providing services such as immunizations, outpatient care, and emergency services. The Chautara prefabricated structure, completed in just 28 days, served as the outpatient department of the district hospital, and provided services to around 70 patients daily. However, the Chauthe Community Health Center has not been fully utilized, with only one room used for monthly vaccination clinics, highlighting issues with local governance and integration into municipal plans. The Narchyang Health Post has been successfully transformed into a birthing center, improving access to maternal healthcare. The Tarkang Community Health Centre is

fully operational and is providing basic health services, conducting health education through counseling, and organizing health camps.

Contribution to results: Did the intervention make a difference i.e., play a role in bringing about the observed results? In particular, how and why has the intervention made a contribution? What factors are needed for the intervention to make a contribution?

> ***"We are still delivering healthcare services from the prefabricated health post constructed by the America Nepal Medical Foundation. This facility has been a significant support; without it, we wouldn't be able to provide healthcare services. It's our only option. Similar prefabricated health posts are also present in other rural municipalities in Sindhupalchowk, and they too are offering healthcare services through these structures." –*** Health post incharge

The intervention has made a significant difference by enabling the establishment and operation of health posts in rural municipalities, thereby improving access to essential healthcare services. In Attarpur, for instance, the health post has been able to maintain its operations and offer a range of health services, including immunizations, outpatient care, emergency services, and maternal care. This intervention has been crucial in ensuring continued healthcare delivery in the aftermath of the earthquake.

Factors Needed for the Intervention to Make a Contribution:

- Budget Allocation: The Attarpur Rural Municipality has allocated a limited budget of around $1,800 USD for the health post, which covers allowances, program implementation, and the remuneration of the ambulance driver. Despite the modest amount, this local budget allocation is vital for the daily operations and maintenance of the health post. The annual workplan and budget for the health post are determined at the federal level, with a budget ceiling provided accordingly. The federal government issues conditional grant as part of the annual workplan, ensuring that funds are allocated and utilized efficiently at the rural municipality level. This centralized approach allows the strategic distribution of resources to meet specific healthcare needs but can limit service delivery as per the community needs to some extent.
- Provincial Support: The Attarpur health post received approximately $9,600 USD from the provincial government for enhancing health infrastructure. This funding is crucial for infrastructure improvements and expanding the health post's capabilities.
- Municipal Infrastructure Development: The provision of a new hospital by the Attarpur municipality further supports the health post, enhancing its capacity to deliver comprehensive healthcare services. This infrastructure development is critical for sustaining and improving healthcare delivery in the region.

The intervention's success is based on coordinated efforts and financial support from local, provincial, and federal governments. The allocation of funds, adherence to conditional transfers through federal government, and continuous infrastructure repair and maintenance are essential factors that contribute to the sustained impact of the health posts in improving healthcare access and delivery in rural municipalities.

Other influences: What other influencing factors were at play?

Several influencing factors have affected the outcomes of the health post rebuilding project.

- Inclusive Planning Process: The annual planning process is not inclusive at the local level, with health posts and Community-Based Organizations (CBOs) excluded. This lack of inclusion in the planning phase contributes to inadequate attention to the actual needs of the community.
- Monitoring System: There is an inadequate monitoring system in place, with elected representatives not making periodic visits. This lack of oversight resulted in insufficient focus on the health sector, leading to various operational challenges.
- Material and Equipment Shortages: Many health posts and birthing centers faces shortages of medicines, materials, and equipment, hindering their ability to provide comprehensive healthcare services.
- Skill Development Opportunities: Healthcare personnel lack up-to-date training, affecting their knowledge and skills. This limits opportunities for skills development impacting the quality of healthcare services delivered.
- Evidence based planning: The use of paper-based record-keeping systems and poor internet connectivity hinders data uploading into the Integrated Health Information Management System (IHIMS). This inefficiency affects evidence-based planning and budgeting in health service delivery.
- Funding and Resource Allocation: Poor evidence-based planning and budgeting, limited participation of health post in-charges in the planning process, and a lack of infrastructure and resources contributes to inefficient and ineffective service delivery. The healthcare activities primarily rely on conditional grants from the federal government, which often does not adequately address the community's actual needs. Local governments (LGs) often lack the capacity to fund additional necessary activities identified by key stakeholders.

Health Post-Specific Responses:

- Attarpur Health Post: The Attarpur Health Post, despite having only five out of the required seven staff, has been providing essential health services to the community. The rural municipality has allocated around $1,800 USD for allowances, programs, and ambulance driver remuneration. Additionally, it received approximately $9,600 USD from the provincial government for enhancing health infrastructure. However, the health post faces challenges such as geographical barriers, staff shortages, and inadequate materials and equipment. The local community often needs to raise funds independently to conduct specific health camps and interventions.
- Chauthe Community Health Center: The Chauthe Community Health Center has not been effectively utilized. The villagers reported that the ward office did not operate the health center as promised, and only one room is used as a vaccination clinic once a month. The local government has not included the project in its annual workplan and budget. The evaluation team from Social Welfare Council recommended forming a Rural Municipality Project Advisory Committee to improve the situation.

- Narchyang Health Post: The Narchyang Health Post, despite being requested by the community, struggles with insufficient government support and inadequate training for healthcare professionals. The health post lacks necessary medical and surgical supplies, and there is a lack of proper repair and maintenance of the facility. The health workers require better training to provide improved services to the local population.

Sustainability: Are the results achieved sustainable?

While the ANMF health post rebuilding project has made significant strides in restoring and enhancing healthcare services in earthquake-affected areas, several challenges need to be addressed to ensure sustainability. Following are the challenges to Sustainability:

- Inclusive Planning Process: The lack of inclusiveness in the planning phase, with health posts and Community-Based Organizations (CBOs) being excluded, poses a significant challenge. Sustainable results require the involvement of all stakeholders to ensure that the interventions meet the actual needs of the community.
- Monitoring and Oversight: An inadequate monitoring system, with elected representatives not making periodic visits, leads to insufficient oversight and focus on the health sector. Effective and sustainable health services need continuous monitoring and evaluation to address emerging issues and adapt strategies accordingly.
- Material and Equipment Shortages: Shortages of medicines, materials, and equipment in many health posts and birthing centers hinder comprehensive healthcare delivery. Addressing these shortages is critical for the sustainability of the health services provided by these facilities.
- Skill Development Opportunities: The lack of up-to-date training for healthcare personnel affects their knowledge and skills, impacting the quality of services delivered. Continuous professional development and training opportunities are essential for maintaining a high standard of care and ensuring long-term sustainability.
- Evidence-Based Planning: The use of paper-based record-keeping systems and poor internet connectivity affecting data uploading into the IHIMS hampers evidence-based planning and budgeting. Transitioning to digital systems and improving connectivity are necessary for efficient and effective healthcare service delivery.
- Funding and Resource Allocation: Reliance on conditional grants from the federal government, which may not adequately address the actual needs of the community, limits the capacity for local governments to fund additional necessary activities. Sustainable health services require a more flexible and needs-based approach to funding and resource allocation.
- Adopting and Sharing Best Practices: By learning from successful examples within Nepal and from developed countries, healthcare providers can adopt proven methods to improve services. Workshops and seminars that bring together health post staff from various regions can facilitate the exchange of experiences and insights. Additionally, best practices from developed countries can be shared through virtual platforms or in-person opportunities like placements. This knowledge transfer can significantly enhance the effectiveness and sustainability of healthcare interventions.

Lessons: What lessons on bringing about long-term change can be learned for future program implementation?

Based on the analysis of the observed results and influencing factors of the ANMF health post rebuilding project, several lessons can be learned for bringing about long-term change in future program implementation:

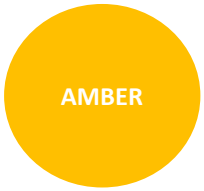
- Inclusive Planning Process:
  - Lesson: Involve all stakeholders, including health posts, Community-Based Organizations (CBOs), and local communities, in the planning process. Their inclusion ensures that the interventions are tailored to meet the actual needs and priorities of the community.
  - Future Implementation: Establish participatory planning committees that include representatives from health posts, CBOs, and local communities to guide project design and implementation.
- Effective Monitoring and Oversight:
  - Lesson: Continuous monitoring and evaluation are essential for maintaining focus on health sector improvements and addressing emerging issues promptly.
  - Future Implementation: Develop a robust monitoring system with regular visits and oversight by elected representatives and health officials. Implement periodic assessments to track progress and make necessary adjustments.
- Adequate Material and Equipment Supply:
  - Lesson: Ensuring a steady supply of medicines, materials, and equipment is critical for the sustainability of health services.
  - Future Implementation: Establish reliable supply chains and maintain an inventory management system to prevent shortages. Secure funding specifically for medical supplies and equipment to ensure uninterrupted service delivery.
- Skill Development and Training:
  - Lesson: Continuous professional development and training for healthcare personnel are vital for maintaining a high standard of care and ensuring the sustainability of health services.
  - Future Implementation: Implement regular training programs and workshops to keep healthcare personnel updated on the latest medical practices and technologies. Encourage knowledge sharing and skill enhancement through partnerships with medical institutions and experts.
- Transition to Digital Systems:
  - Lesson: Moving from paper-based record-keeping to digital systems can improve data management, evidence-based planning, and budgeting.
  - Future Implementation: Invest in digital infrastructure and internet connectivity to facilitate the transition to digital health information systems. Provide training for health staff on using digital tools for data management and reporting.
- Flexible and Needs-Based Funding:
  - Lesson: A flexible funding approach that addresses the actual needs of the community is essential for sustainable health services.

    - Future Implementation: Advocate for more flexible funding mechanisms at the federal and provincial levels that allow for adjustments based on local needs and priorities. Encourage local governments to allocate additional resources for health interventions identified by community stakeholders.
- Adopting and Sharing Best Practices:
    - Lesson: Learning from successful examples within Nepal and from developed countries can enhance the effectiveness and sustainability of healthcare interventions.
    - Future Implementation: Organize workshops and seminars to facilitate the exchange of best practices among health post staff from different regions. Utilize virtual platforms and in-person opportunities for knowledge transfer and skill-building. Encourage placements and exposure visits to model health facilities to learn and adopt proven methods.
- Community Engagement and Ownership:
    - Lesson: Community engagement and ownership of health initiatives are crucial for long-term sustainability.
    - Future Implementation: Foster strong community involvement in health programs through awareness campaigns, feedback mechanisms, and participatory decision-making processes. Empower local communities to take ownership of health interventions by involving them in planning, implementation, and monitoring.

Likely future impact: Is it likely the intervention will make a contribution to results in the future?

It is likely that the project will make a meaningful contribution to future results, provided that certain improvements are made. These include fostering inclusive planning processes, enhancing monitoring and oversight, ensuring adequate material and equipment supply, and emphasizing continuous skill development and training for healthcare personnel. Additionally, transitioning to digital systems, adopting flexible and needs-based funding approaches, and sharing best practices can significantly enhance the effectiveness and sustainability of health post rebuilding project. By addressing these factors and actively engaging the community, the project can continue to improve healthcare access and delivery in rural and underserved areas.

Oxygen Plant TUTH



Satisfactory achievement in most areas but partial achievement in others with room for improvement. An area where ANMF is contributing to advancing healthcare in Nepal but where improvements are required to achieve the GREEN status.

Brief description of submitted proposal against the report provided after completion of the project.

Proposal	Report
• The primary objective was to acquire a new 400–500 liters oxygen concentration plant for TUTH. The plant, to be strategically located behind the hospital premises, was aimed to supply oxygen to critical areas, including the Operation Theater, Intensive Care Unit, and Postoperative Ward. • The oxygen plant which was already present was not functional and TUTH had to buy oxygen cylinders from other hospitals, spending about USD 40,000 per year in medical oxygen cylinders. In addition, the problem in supply and pipelines resulted in only 70-80% oxygen output. Thus, a separate oxygen cylinder was needed for those patients who requires higher oxygen concentration. • This project aimed to reduce expenses on oxygen cylinders, enhance patient safety, and optimize the use of the existing oxygen plant for remaining wards. • The estimated budget for the Oxygen Concentration Plant is approximately USD 90–100,000. • The project was anticipated to take around three months, including one month for field surveys, plant specifications, purchase, and installation. The new Oxygen Plant was expected to be seamlessly connected to the existing pipeline of the Operation Theater and Intensive Care Unit within this timeframe.	• ANMF received a brief report but only with partial information on the results achieved. The report does not reflect the extent to which the newly constructed oxygen plant helped in reduction of expenses on oxygen cylinders and improvement on patient safety.

Results: What have been the observed results of the project?

A 500 liters of oxygen plant was installed which is fully functional and is primarily used to supply oxygen to Operation Theater (OT), Intensive Care Unit (ICU), and Medical Intensive Care Unit (MICU). Previously, oxygen was supplied to the ICU, OT, and wards using oxygen cylinders. However, since installing the oxygen plant, TUTH supplies oxygen directly through pipelines.

Contribution to results: Did the intervention make a difference i.e., play a role in bringing about the observed results? In particular, how and why has the intervention made a contribution?

This oxygen plant significantly helped reduced the load from the other two oxygen plants which were already present there at TUTH. The constructed oxygen plant has helped TUTH supply medical oxygen to patients in much lower cost (almost free) in comparison to other private hospitals in Nepal. The plant was strategically placed near the ICU and OT since these areas treat critically ill patients and highly depend on a stable oxygen supply.

Prior to the installation of the oxygen plant, TUTH relied on purchasing oxygen cylinders, which was costly. The new oxygen plant has helped reduce these expenses. However, the plant's kits are quite expensive, and it requires skilled technical staff for its ongoing operation and maintenance. Consequently, the cost savings on oxygen cylinders are not substantial.

The most significant benefit of the plant is the improved ease of access to oxygen for patients. The plant enables the local production of oxygen, eliminating the need for time-consuming imports from across the border. This local production mitigates issues caused by highway blockages due to landslides and floods, which previously led to severe oxygen shortages in the Kathmandu Valley.

Currently, the plant ensures a reliable oxygen supply for TUTH and other government hospitals, such as Gangalal Hospital. Notably, TUTH provides oxygen to patients free of charge, unlike private hospitals that impose a fee for it.

Reflecting on the COVID-19, the surge in patients was overwhelming, and despite operating the plant at full capacity, TUTH struggled to meet the demand for oxygen. The Oxygen Plant Operator with his team worked tirelessly around the clock to supply oxygen to those in need. Both government and private hospitals were sending their patients to TUTH because of TUTH's ability to produce oxygen. The influx of requests was very intense.

During the peak of the crisis, TUTH distributed oxygen cylinders to other hospitals. It was an incredibly challenging period. The Oxygen Plant donated by ANMF was crucial in helping TUTH manage the situation.

> ***"Reflecting on the COVID-19 pandemic brings me to tears. During that time, the influx of patients was overwhelming. We worked around the clock to supply oxygen to those in need. I recall working a continuous 48-hour shift, with oxygen requests coming in every five minutes. The Oxygen Plant donated by ANMF was a tremendous help during that critical period."*** – Oxygen Plant Operator TUTH

What factors are needed for the intervention to make a contribution?

Running the plant requires a reliable electricity supply, making it crucial to monitor its consumption closely, and selecting a plant capacity that matches this usage. Additionally, a specific area and space must be allocated for the Oxygen Plant. Only after securing these essentials can the procurement of a plant proceed.

In many hospitals, Oxygen Plants are installed without proper shelter, leaving them exposed to direct sunlight and rain, which can cause significant damage to the plant. At TUTH, an old plant was replaced with a new one donated by ANMF. All key factors were addressed before installation, unlike other places where plants are often left exposed, leading to issues like transformer damage. It is vital to assess and consider all these factors before installing an Oxygen Plant.

At TUTH, these requirements were thoroughly studied before installing the new plant. The previous Indian plant was costly to maintain, prompting the decision to replace it with the new one. Similarly, the oxygen plant donated by ANMF required expensive repairs. World Health Organization recently donated the spare parts needed to fix it.

TUTH lacks skilled and trained technical staff, relying heavily on its supplier for the repair and maintenance of the oxygen plant. Unfortunately, the supplier often delays addressing issues and does not provide timely service. They only prioritize repairs when the plant completely shuts down. Despite multiple requests for assistance, they frequently fail to respond or comply, leaving TUTH with limited options.

On the other hand, TUTH has not provided enough up-to-date training to the Oxygen Plant Operator. Training opportunities are often decided by the Ministry of Health and Population (MoHP) and given to others who have influence, and these opportunities are not communicated to everyone. Training is crucial for someone directly responsible for running a plant.

> ***"I've devoted 21 years to operating Oxygen Plants at TUTH, essentially dedicating my entire career to this institution. It's disheartening to note the lack of updated training provided by TUTH. While others with influence are offered training opportunities, I am yet to be informed of such opportunities. Despite this, my expertise has grown through hands-on experience and a learning-by-doing approach."*** - Oxygen Plant Operator TUTH

According to the key informant, TUTH has not prioritized the maintenance and regulation of the Oxygen Plant. Their attention seems to be triggered only in times of disaster when the critical need for oxygen becomes evident. Outside of such crises, regular maintenance is not considered a priority.

TUTH needs to allocate certain amount of budget and specific technical resources for regular maintenance and operation of the oxygen plant to ensure longevity, efficiency, safety, quality control, and environmental compliance. This was ensured by ANMF before handing over the oxygen plant to TUTH. However, after the handover, ANMF has not recently checked if that is being done by TUTH – which is a part of ANMF's responsibility for ensuring its sustainability.

Other influences: What other influencing factors were at play?

There were several other influencing factors.

- A governance mechanism or technical committee needed to be established to oversee the entire construction of the oxygen plant. This committee included a senior official from TUTH, a technical biomedical expert from TUTH, a focal person from the vendor, and a focal person from ANMF. The process required significant time and commitment from all these individuals, but this time and commitment were not accounted for in the proposal submitted by TUTH.
- The vendor was six months late in installing the oxygen plant, beyond the agreed-upon timeframe. Although the payment to the vendor was reduced due to this delay, it extended the overall construction period. Such delays can directly impact the project outcomes and affect the trust among ANMF's donor community.

Sustainability: Are the results achieved sustainable?

While the Oxygen Plant has achieved significant results in providing oxygen to patients and reducing costs, its sustainability depends on TUTH's commitment to regular maintenance, adequate training of personnel, establishment of a governance

mechanism, and effective project management practices. Without proper attention to these factors, the sustainability of the achieved results may be at risk.

Lessons: What lessons on bringing about long-term change can be learned for future program implementation?

The project offered several valuable lessons.

- Prioritize Maintenance and Training: Ensure that adequate attention is given to the regular maintenance and training of personnel involved in operating and maintaining the Oxygen Plant. Regular training and maintenance are crucial for sustaining the benefits achieved through such interventions.
- Establish Governance Mechanisms: Set up governance mechanisms or technical committees consisting of relevant stakeholders to oversee the construction, operation, and maintenance of essential infrastructure projects. This ensures accountability, commitment, and effective management throughout the project lifecycle.
- Ensure Timely Execution: Ensure timely execution of projects by closely monitoring vendor performance and adhering to agreed timelines. Delays in project implementation can impact outcomes, affect trust among stakeholders, and potentially jeopardize project sustainability.
- Communication and Collaboration: Foster open communication and collaboration among all stakeholders involved in the project. Ensure that all relevant information, including training opportunities and project updates, is effectively communicated to all parties involved.
- Sustainable Funding and Resource Allocation: Allocate sufficient budget and resources for the ongoing operation, maintenance, and sustainability of infrastructure projects. This includes budgetary provisions for regular maintenance, technical support, and staff training to ensure long-term viability.
- Learning from Past Experience: Reflect on past experiences and challenges encountered during project implementation to identify areas for improvement and incorporate lessons learned into future program planning and implementation.

Likely future impact: Is it likely the intervention will make a contribution to results in the future?

> ***"Due to the high costs of repair and maintenance, TUTH finds it unaffordable. This creates a dilemma whenever the plant breaks down: whether to continue repairing it or to stop allocating more budget towards the plant, which has been in use for seven years."* –** Deputy Controller, TUTH

Installing the Oxygen Plant at TUTH has already made significant contributions to improving patient care, reducing costs, and ensuring a reliable oxygen supply. However, for the intervention to continue making a contribution to results in the future, several factors need to be considered:

1. Sustained Maintenance and Operation
2. Effective Governance and Oversight
3. Addressing Training Gaps

4. Long-term Sustainability Planning
5. Regular Monitoring and Evaluation

Capacity Building in Healthcare

Pediatric Critical Care Fellowship

GREEN

Strong achievement across all questions set out in the evaluation matrix. Stands out as an area of good practice where ANMF is making a significant positive contribution in advancing healthcare in Nepal.

Brief analysis of submitted proposal against the report provided after completion of the project

Proposal	Report
• There are less than ten pediatric care specialists in Nepal. • Dr. Puja Amatya's fellowship aimed to address this gap, enhancing Pediatric Intensive Care Unit (PICU) care and laying the groundwork for a fellowship program at Patan Academy of Health Sciences (PAHS). • The program aimed to establish a fellowship-trained Pediatric Critical Care specialist at Patan Hospital, with Dr. Puja Amatya's attendance in a sponsored program in Chennai, India. • It sought to enhance care for critically ill children at Patan Hospital, introduce critical care education in pediatric residency, educate non-physician staff, disseminate critical care management practices, and standardize pediatric critical care delivery nationwide. • The estimated budget for the fellowship program was total of USD 5,361.83 for 2 years.	• ANMF received an email reply from Dr Puja and a video reflecting on Dr Puja's/PAHS's achievements after the fellowship program

Results: What have been the observed results of the project?

Dr. Puja Amatya, after completing her Pediatric Critical Care fellowship at Kanchi Kamakoti CHILDS Trust Hospital (KKCTH) in Chennai, India, has now assumed the role of Pediatric Intensivist at Patan Academy of Health Sciences (PAHS). Upon her return, she initiated the following reforms.

- Revision of the protocols for managing critically ill children.
- Introduced point-of-care ultrasonography and echocardiography.
- Planning to start a fellowship in pediatric critical care in Nepal which is the first of its kind in Nepal.
- Expanded PAHS's services by setting up a pediatric high dependency unit
- Implemented simulation-based learning to train residents and fellows in common scenarios encountered in the Pediatric Intensive Care Unit (PICU).
- Started monthly assessments of quality indicators, incorporating those evaluations into PICU audits.

- Established monthly morbidity and mortality meetings as part of the academic schedule to review cases and identify potential improvements.

"I would like to express my gratitude to the America Nepal Medical Foundation for their support in completing my fellowship program. Upon returning to PAHS, I began revising the protocol for critically ill children. We have introduced point-of-care ultrasonography and echocardiography, which will undoubtedly enhance the quality of care for critically ill children in Nepal. Additionally, we are planning to launch a fellowship in critical care in Nepal in the near future." – Dr Pooja Amatya

Contribution to results: Did the intervention make a difference i.e., play a role in bringing about the observed results? In particular, how and why has the intervention made a contribution?

The institution where Dr. Puja completed her fellowship, KKCTH, is a highly regarded 200-bed pediatric tertiary care referral hospital accredited by the National Accreditation Board for Hospitals and Healthcare Providers (NABH) in India. The Pediatric Critical Care Fellowship Programme at KKCTH is also accredited by the Indian Academy of Pediatrics Intensive Care Chapter (IAP ICC), making it one of the top choices in South India for aspiring pediatric critical care fellows.

Dr. Puja's experience at KKCTH was instrumental in her professional development. She managed critically ill children with complex conditions and received extensive hands-on training in the PICU. Additionally, she participated in various training sessions and workshops, which enhanced her knowledge and skills.

The expertise and practices she acquired at KKCTH have been pivotal in implementing evidence-based practices at PAHS. Her hands-on experience at KKCTH has led to several advancements in healthcare delivery at PAHS, including USG-guided vascular access, improved management of critically ill ventilated children, the use of point-of-care ultrasound, and the transportation of critically ill children. These contributions have enhanced the quality of care for critically ill children at PAHS.

What factors are needed for the intervention to make a contribution?

PAHS is highly supportive and encourages professional development among its staff. To pursue a fellowship, PAHS requires permanent staff to have at least three years of work experience at the institution. This requirement provides a clear opportunity for an Assistant Professor to apply the skills and knowledge gained during their fellowship.

Other influences: What other influencing factors were at play?

Other influencing factors include:

- Her enthusiasm to provide evidence-based care to critically ill children in Nepal.
- Her additional role as an Associate Professor in the Department of Pediatrics which helps build a capable workforce in Nepal.
- Her vision/plans to attend critical care conferences to stay updated on current practices.

- Her intention to pursue short observerships in pediatric cardiac intensive care and pediatric onco-critical care.
- Her ability to collaborate. Dr. Puja played a significant role during the COVID-19 pandemic by collaborating with the Ministry of Health and Population (MoHP) to prepare a manual for Pediatric Essential Critical Care (PECCT) and served as a Master Trainer, training health providers across Nepal under the National Health Training Center. She also helped establish the Pediatric Critical Care Chapter in collaboration with the Nepal Pediatric Society and serves as a co-chair, focusing on skill development training for pediatricians in various provinces.
- Her experience working with MoHP and Nick Simon's Institute (NSI) to develop Minimal Service Standards (MSS) for tertiary care hospitals as a content expert for pediatric high dependency units and PICUs.
- Her networks. Dr. Puja has networked with experts from Michigan State University, who support the PICU fellowship programme. A pediatric intensivist from South Hampton Hospital visits PAHS twice a year, recently providing bronchoscopy training in the PICU. They are also building the nurses' capacity.

Sustainability: Are the results achieved sustainable?

The results achieved appear to be sustainable due to several key factors:

- Institutional Support from the PAHS.
- Dr. Puja's fellowship at an institution like KKCTH equipped her with advanced skills and knowledge, which she has successfully transferred to PAHS. The hands-on experience and evidence-based practices she learned are now being applied to improve care standards.
- The establishment of a pediatric high dependency unit, the introduction of point-of-care ultrasonography and echocardiography, and the implementation of simulation-based learning for training residents and fellows have strengthened PAHS's capacity and infrastructure. These developments provide a foundation for continued high-quality care.
- The establishment of the first pediatric critical care fellowship in Nepal ensures a pipeline of well-trained professionals who can sustain and further develop the quality of critical care in the country.
- Dr. Puja's ability to collaborate with various organizations, such as the MoHP, NSI, and international experts, enhances the sustainability of the interventions. These collaborations provide additional resources, training, and expertise, reinforcing the changes implemented at PAHS.
- Dr. Puja's commitment to attending critical care conferences and pursuing further training in specialized areas like pediatric cardiac intensive care and pediatric onco-critical care ensures that she remains updated on best practices and continues to bring new knowledge and skills to PAHS.
- Dr. Puja's role as an Associate Professor and her leadership in establishing and co-chairing the Pediatric Critical Care Chapter in Nepal sustainable workforce capable of maintaining and advancing the quality of care.

Lessons: What lessons on bringing about long-term change can be learned for future program implementation?

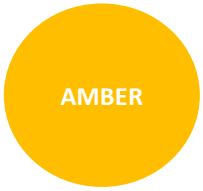
The project offered several valuable lessons.

- Gaining the support of the host institution is crucial for the success and sustainability of any intervention. PAHS's commitment to staff's professional development provided a strong foundation for the project.
- Future programs should prioritize training at reputable institutions and ensure that participants gain practical experience.
- Investing in infrastructure, such as setting up a pediatric high dependency unit and introducing advanced medical technologies like point-of-care ultrasonography and echocardiography, is essential for long-term improvements.
- Establishing educational programs, such as the pediatric critical care fellowship in Nepal, helps create a pipeline of skilled professionals.
- Continuous education and training initiatives, like simulation-based learning and quality audits, ensure that healthcare providers are well-prepared and continuously improving.
- Implementing monthly assessments of quality indicators and conducting morbidity and mortality meetings allows for ongoing evaluation and improvement. This practice ensures that interventions remain effective and are continuously refined based on feedback and outcomes.
- Building partnerships with local and international organizations is essential to provide additional resources, expertise, and support. Dr. Puja's collaborations with the MoHP, NSI, and international experts from Michigan State University and South Hampton Hospital brought valuable insights and training opportunities to PAHS.
- Having a visionary leader who is committed to the project's goals is critical. Dr. Puja's dual role as a clinician and an educator allowed her to effectively implement changes and mentor the next generation of healthcare providers.
- Creating policies that support professional development, like PAHS's requirement for staff to have a minimum of three years of experience before pursuing further studies, helps retain skilled professionals and ensures they contribute significantly to the institution upon their return.
- Ability to respond to emerging needs, such as Dr. Puja's role during the COVID-19 pandemic, demonstrates the importance of adaptability in implementing successful interventions. Programs should be flexible and adaptive enough to incorporate new challenges and opportunities as they arise.

Likely future impact: Is it likely the intervention will make a contribution to results in the future?

The fellowship program has had a positive impact on improving the quality of pediatric critical care at PAHS. It is highly likely that the interventions initiated by Dr. Puja Amatya will continue to make significant contributions to improving pediatric critical care at PAHS in the future.

ANMF-NCCDF Scholarship Award for Critical Care Nurse Training Program



Satisfactory achievement in most areas but partial achievement in others with room for improvement. An area where ANMF is contributing to advancing healthcare in Nepal but where improvements are required to achieve the GREEN status.

Brief analysis of submitted proposal against the report provided after completion of the project

Proposal	Report
• Due to the substantial costs associated with ICU services, ICU bed availability remains limited worldwide. • In Nepal, critical care services are primarily concentrated in Kathmandu Valley, leaving critically ill patients outside the valley underserved. • This project aimed to certify ten critical care nurses from various regions outside Kathmandu Valley, aiming to build their capacity in critical care, surge capacity during emergency, and to improve patient outcomes in ICUs outside of Kathmandu valley. • The project had a total budget of 11,480 USD and lasted for one year.	• ANMF received an email reply from the NCCDF, and a report including pictures of the nurses who received the training.

Results: What have been the observed results of the project?

The Critical Care Nurse Training Program (CCNTP) was held at the Hospital for Advanced Medicine and Surgery (HAMS) from September 19, 2022, to January 3, 2023. As a result of this three-month training, ten critical care nurses from various hospitals outside the Kathmandu Valley have successfully completed the program. These nurses are working in the Intensive Care Units (ICUs) of their respective hospitals, providing critical care services across different regions. The nurses who received the training are mentioned below.

1. Sonali Verma - Narayani Regional Hospital, Birgunj, Madhesh Province
2. Prabha Adhikari - Western Regional Hospital, Pokhara, Gandkai Province
3. Shital Rokaya - Karnali Academy of Health Sciences, Jumla, Karnali Province
4. Sharmila Thapa - Karnali Academy of Health Sciences, Jumla, Karnali Province
5. Surabi Bhandari - Seti Province Hospital, Dhangadi, Sudurpashchim Province
6. Monika Chaudhary - Seti Province Hospital, Dhangadi, Sudurpashchim Province
7. Laxmi Rawat - Bayalpata Hospital, Achham, Sudurpashchim Province
8. Laxmi Bhatta - Bayalpata Hospital, Achham, Sudurpashchim Province
9. Sarita Rajkhan - Nepalgunj Medical College Teaching Hospital, Banke, Lumbini Province
10. Varmaya Khadka - Nepalgunj Medical College Teaching Hospital, Banke, Lumbini Province

Contribution to results: Did the intervention make a difference i.e., play a role in bringing about the observed results? In particular, how and why has the intervention made a contribution?

''The training transformed my self-confidence and professional skills through self-evaluation and practical sessions.'' – Trainee, CCNTP

Following interventions made a difference in CCNTP.

- Trainers boosted trainees' confidence by providing hands-on experience and also building their communication skills - showing how to effectively interact with doctors.
- Upon returning to the Hospital after the training, trainee implemented a several positive change such as:
    - Introducing proper protocols for handling critically ill patients with low blood pressure. This led to a significant shift in our clinical practices, moving away from potentially harmful practices like improper use of Norad.
    - Updating procedures for using vasopressin correctly.
    - Maintaining calorie intake based on patient weight while on NG tube
    - Checking DNS before NG feeding.
    - Performing thorough head-to-toe examinations and communicating findings to doctors, rather than just following orders.
    - Managing Ventilator Associated Pneumonia (VAP) and infection prevention.
    - Following GCS score for intubation for patients.
    - Monitoring patient agitation using specific charts.

''CCNTP training has been transformative, enhancing our knowledge, confidence, and patient care practices. It provided us with a reliable guideline, increased our work satisfaction, and was a significant achievement in my career, boosting my self-esteem and making me feel proud of the certification I earned.'' – Trainee, CCNTP

What factors are needed for the intervention to make a contribution?

Following factors are important for making a contribution.

- Commitment from Participants and Institutions: A mutually agreed bond was established between the foundation and participants, requiring them to work at their respective institutions for a minimum of two years. This ensures that the skills and knowledge gained during the training are effectively implemented and contribute to long-term improvements in patient care.
- Highly Qualified Trainers: The trainers were exceptionally qualified and dedicated to teaching. Their expertise and commitment were crucial in providing high-quality training.
- Inclusive training approach: Despite the diverse backgrounds and varying resource availability among trainees, the trainers focused on building skills and supporting in clinical procedures.
- Hands-On Practical Training: Trainers provided practical demonstrations of clinical procedures on patients at HAMS Hospital. This hands-on approach allowed trainees to practice the skills themselves, followed by evaluations and feedback.
- Constructive feedback, including both positive aspects and areas for improvement, helped us trainees refined their skills. Trainers guided on how to address weaknesses effectively.

- Personalized Support and Mentorship: Throughout the training session, the trainers offered personalized support and mentorship, ensuring that trainees felt comfortable and confident in asking questions and seeking guidance.
- The trainers shared their experiences as critical care nurses, reflecting on their work to provide trainees with real-world examples and insights. This helped bridge the gap between theoretical knowledge and practical application.
- Focused Skill Development: The trainers were highly skilled and provided focused, hands-on training in critical care procedures. Their ability to convey complex concepts in an understandable manner and their patience in addressing our questions were vital to our learning process.

Other influences: What other influencing factors were at play?

There are several other influencing factors such as:

- The Government typically do not initiate such training and education programs. This lack of official endorsement can affect the perceived value and impact of the training.
- Initially, institutions like Narayani Hospital were hesitant to send nurses for such training. However, this attitude has changed over the past few years, with more nurses, including those from general wards, now being sent for similar training programs.
- NCCDF/CCNAN selects highly capable Nurse Instructors. These instructors must complete the six-month Critical Care Nurse Instructor Program (CCNITP) and meet other criteria including having a Bachelor's degree in Nursing and four years of ICU experience.
- Nurses are selected from public institutions and medical colleges with low ICU resources. Candidates must have a Bachelor's degree in Nursing and at least one year of ICU experience. The selection process involves coordination with Intensivists, ICU In-Charges, and a virtual interview conducted by the President and Nurse Coordinator of NCCDF.
- According to the respondent, senior staff often viewed training as a means to secure allowances and travel opportunities rather than a genuine effort to enhance skills. This mindset poses challenges in implementing new skills learned from the training.

Sustainability: Are the results achieved sustainable?

The sustainability of the results achieved through the CCNTP is supported by several strong factors, including participant’s commitment, high-quality training, practical hands-on experience, and evolving institutional support. However, potential risks such as the need for ongoing support, maintaining a pool of qualified trainers, and overcoming institutional resistance must be addressed to ensure long-term sustainability. Continuous monitoring, follow-up training, and efforts to secure government and broader institutional endorsement will be key to sustaining the positive outcomes of the CCNTP.

Lessons: What lessons on bringing about long-term change can be learned for future program implementation?

By incorporating following lessons into future program designs, healthcare training initiatives can be more effective in bringing about long-term, sustainable changes in clinical practices and patient care.

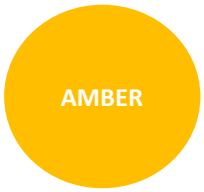
- Establishing a mutually agreed bond between the foundation and participants, requiring them to work at their respective institutions for a minimum of two years, has proven effective in ensuring the application and integration of new skills.
- Maintaining rigorous selection criteria for trainers and ensuring their continuous professional development will be crucial for the sustainability and success of future training programs.
- The inclusive approach of addressing diverse backgrounds and varying resource availability among trainees was essential for building skills across different contexts.
- Practical demonstrations and hands-on experiences were crucial for skill retention and confidence building among trainees.
- Constructive feedback and personalized support helped trainees refine their skills and address weaknesses effectively.
- Implementing mechanisms for ongoing mentorship and feedback, even after the training period, will be important for sustained skill improvement and confidence building among trainees.
- Trainers sharing their experiences and real-world examples helped bridge the gap between theoretical knowledge and practical application.
- Advocating for government and broader institutional support will be key to enhancing the credibility and impact of future training programs.
- Overcoming initial resistance and skepticism from senior staff was necessary for implementing new skills.
- Implementing robust monitoring and evaluation frameworks for future programs will be essential for assessing impact, identifying areas for improvement, and ensuring long-term sustainability of the training outcomes.

Likely future impact: Is it likely the intervention will make a contribution to results in the future?

Based on the observed results and the factors contributing to those outcomes, it is highly likely that the CCNTP will continue to make a significant contribution to advancing critical care in Nepal. The program's design, emphasis on practical training, and the strong commitment of participants and trainers create a robust foundation for sustained impact. However, to ensure long-term success, ongoing support, continuous professional development, and efforts to secure broader institutional and government endorsement will be essential. By addressing these factors, the CCNTP can achieve lasting improvements in critical care practices and patient outcomes across various regions.

Preventive Health Initiatives

Kathmandu Eye Study



Satisfactory achievement in most areas but partial achievement in others with room for improvement. An area where ANMF is contributing to advancing healthcare in Nepal but where improvements are required to achieve the GREEN status.

Brief analysis of submitted proposal against the report provided after completion of the project

Proposal	Report
• Kathmandu Eye Study will estimate in depth causes of avoidable blindness and chronic diseases in an urban population. • The aim of the study is to estimate the prevalence of eye diseases among 5,800 people aged 40 years and above. • The findings from the study will help understand the burden of eye diseases, the current services available, constraints and limitations in accessing and utilizing eye care services by people. • The findings will help implement health services based upon evidence-based research findings. • The study period is 6 years (2018-2023) • The proposal stated that a monitoring team will be formed to evaluate the work conducted by field workers	• ANMF has not received any report yet. • Updates were provided via email in past but ANMF has not received any project updates recently.

Results: What have been the observed results of the project?

The Kathmandu Eye Study is currently in the report preparation phase. Although the study was originally scheduled for completion in 2023, the final report is yet to be completed. Despite this delay, the study is notable for being the first large-scale, urban-based ocular study in Nepal. Once finalized, the study is expected to provide valuable data on the prevalence of ocular diseases in an urban setting. This information is expected to play a critical role in future policy planning and healthcare strategy development, helping to address the burden of eye diseases more effectively.

Contribution to results: Did the intervention make a difference i.e., play a role in bringing about the observed results? In particular, how and why has the intervention made a contribution?

The study took a systematic approach to sample selection and data collection. The use of cluster sampling with probability proportional to size ensured that the study sample was statistically representative of the target population. The creation of compact segments, enumeration of households, and random selection of participants minimized biases and enhanced the reliability of the findings.

Following strategies were used for sample selection.

- Cluster Sampling with Probability Proportional to Size: Selected wards from different areas based on population size.

- Creation of Compact Segments: Divided each selected ward into compact segments, with each segment containing approximately 70 households.
- Listing: Compiled a list of potential participants.
- Simple Random Sampling: From the list of households, randomly selected 35 participants per segment using simple random sampling.
- Inclusion Criteria: Included individuals who had resided in Kathmandu district for at least six months and were aged 40 and above.
- Engagement with Local Authorities: Coordinated with local ward officials and chairpersons during the planning phase to facilitate smooth implementation and participant cooperation.
- Utilization of Secondary Data: Used National Population and Housing census data to inform the selection of wards and ensure representativeness.
- Community Collaboration: Worked with Female Community Health Volunteers (FCHVs) to enumerate households and ensure comprehensive coverage and participation within the community.

What factors are needed for the intervention to make a contribution?

Several critical factors are essential for the Kathmandu Eye Study to effectively contribute to its objectives:

- Standardized training program: The entire clinical study team underwent comprehensive training to ensure uniformity in procedures and minimize variations in data collection methodologies.
- Collaborative approach to questionnaire development: Experts participated in a workshop to collaboratively develop the study questionnaire, ensuring it comprehensively addresses relevant aspects of eye diseases among the urban population.
- Community Health Volunteer Engagement: FCHVs participated in a dedicated orientation program at the Tilganga Institute of Ophthalmology (TIO). They were informed about the study's objectives and methodologies to effectively engage and encourage community participation.
- Anticipation of Non-Response Challenges: Recognizing the challenge of persuading participants to visit hospitals for the study, the research team proactively incorporated a 15% non-response rate into the sample size calculations. This strategy helps ensure the study maintains an adequate participant pool despite potential recruitment difficulties.
- Utilization of Secondary Data Sources: Before primary data collection commenced, the research team leveraged data from the Central Bureau of Statistics (CBS), particularly the 2011 population and housing census. This secondary data guided the selection of wards using cluster sampling, facilitating the identification of demographically representative samples within Kathmandu.

Other influences: What other influencing factors were at play?

Other influencing factors included following:

- Collaboration with the government: The study team designed and conducted the Kathmandu Eye Study in collaboration with the government. The Social Welfare Council and the Nepal Health Research Council granted approval for

the research. The team collaborated with FCHVs to list households and raise community awareness about the study.

- Community awareness: Community awareness about the study was fostered through a series of proactive engagement strategies. The research team visited various wards in Kathmandu, engaging in discussions with local ward officials, including ward chairpersons, to explain the study's purpose, procedures, and potential benefits. They sought support from the Kathmandu municipality. To further enhance understanding and participation, the team organized meetings at the municipal level to discuss the study's impact and relevance.
- Dissemination of research findings: TIO plans to disseminate the research findings to the government. However, the findings have not yet been shared with or validated by government authorities. While government officials were involved during the data collection phase, they were not included in the analysis phase. This lack of involvement may reduce their sense of ownership and could affect the replicability or application of the findings in other parts of Nepal.

Sustainability: Are the results achieved sustainable?

The research is likely to yield findings that can significantly enhance the quality of eye care services. However, the actual impact will depend entirely on the effective implementation of these research findings.

Preliminary analysis of the methodology used in the study suggests following.

- The study employed a robust multi-stage sampling approach, including cluster sampling with probability proportional to size, the creation of compact segments, and random selection of participants. This method ensures that the sample is representative, which enhances the reliability and validity of the findings.
- Comprehensive training was provided for the clinical study team and FCHVs ensured standardized procedures and minimized variability. This consistency in data collection is crucial for producing reliable data that can be used for future policy planning.
- The study team engaged with local authorities and FCHVs for increasing community participation. This collaborative approach facilitated smooth data collection and fostered a sense of ownership among local stakeholders.
- Pamphlets and workshops helped in educating potential participants about the study’s objectives, thereby improving participation rates.
- The study received approval from the Social Welfare Council and the Nepal Health Research Council. Collaborating with the government during the data collection phase also laid the groundwork for future cooperation.
- Utilizing data from the Central Bureau of Statistics (CBS) for Ward selection and sample size calculations ensured that the study design was tailored to the demographic context of Kathmandu.
- By accounting for a 15% non-response rate, the study team proactively addressed potential challenges in participant recruitment, which is crucial for maintaining the integrity of the sample size.

- The final report is still in preparation, and findings have not yet been shared with or validated by government authorities. This delay can affect the timely application of the study's findings in policy and healthcare planning.
- Government officials were not involved in the analysis phase, which may reduce their sense of ownership and commitment to the study's findings. This could impact the replicability and implementation of the results in other regions of Nepal.
- Donors including ANMF were not periodically updated about project's status. This can decrease donor trust and might reduce future funding which is crucial for implementation of research findings.

Lessons: What lessons on bringing about long-term change can be learned for future program implementation?

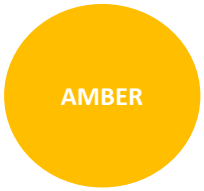
Following lessons can be crucial for future program implementation.

- Establish stringent project management practices, including clear milestones, regular progress reviews, and accountability mechanisms to avoid delays.
- Continue to use and refine robust sampling methods to ensure the reliability and validity of data in future studies.
- Develop detailed training programs and refresher courses for all involved personnel to maintain high standards in data collection and reduce variability.
- Strengthen community engagement strategies, including early and continuous involvement of local leaders and stakeholders in dissemination of research findings and incorporating feedback for effective implementation, to build trust and encourage active participation.
- Integrate secondary data analysis beyond data from CBS and include global best practices into the planning phase of future studies to ensure demographic representativeness and efficient resource utilization.
- Include government representatives in all phases of the research, from planning to data analysis and implementation, to enhance their sense of ownership and commitment to implementing findings.
- Develop strategies to minimize non-response, such as follow-up protocols and participant incentives, to ensure robust sample sizes.
- Create a dissemination plan that includes timelines for sharing preliminary findings and final reports with stakeholders, ensuring prompt and effective utilization of research outcomes.
- Foster long-term relationships with key stakeholders to ensure ongoing support and collaboration, enhancing the sustainability and impact of future programs.
- Develop implementation plans alongside research projects, detailing how findings will be translated into practice, and ensure continuous monitoring and evaluation to adapt strategies as needed.
- Regularly update donors on the study's progress and actively involve them in the dissemination of findings. This approach can enhance trust and potentially attract additional funding for successful implementation.

Likely future impact: Is it likely the intervention will make a contribution to results in the future?

The intervention is likely to make a positive contribution in future. The methodology employed in the Kathmandu Eye Study, coupled with strong community engagement, comprehensive training, and collaboration with government authorities, has laid a solid foundation for producing reliable and valuable data. However, the actual impact will depend on the timely completion of the final report, effective dissemination of findings, and commitment from government and stakeholders to implement the research outcomes. By addressing the lessons learned and ensuring continuous engagement and collaboration, the study's findings can be successfully translated into enhanced eye care services and policy planning, ultimately contributing to advancing healthcare in Nepal.

Community Health Strengthening Project



Satisfactory achievement in most areas but partial achievement in others with room for improvement. An area where ANMF is contributing to advancing healthcare in Nepal but where improvements are required to achieve the GREEN status.

Brief analysis of submitted proposal against the report provided after completion of the project

Proposal	Report
• Cervical cancer accounts for 21.4% of all cancers in women, mostly common in women aged 35-64 years. About 32,735 people are living with HIV with prevalence of 0.17%. More than one third of the infections are in female – of which, 81% are among women within reproductive age group. • Many women and girls are not educated due to poverty, which makes them more vulnerable to sexual and reproductive challenges. • The goal of the programme was to conduct health screening camp among vulnerable people (HIV AIDS and Cervical Cancer) in coordination with the tertiary hospital in Nepal. The project also aimed to provide the diagnosed patient with medicine and referral cost as those costs are relatively high. In addition, the project aimed to increase awareness on health issues to vulnerable people, provide orientation about sexual and reproductive health rights, and HIV/AIDS by mobilizing community group and using information education and communication material. • The project aimed to evaluate the success by assessing the number of beneficiaries, number of cases screened, and increase in knowledge on sexual reproductive health through pre and post-test. • The total budget was USD 5,000.	• ANMF received a series of monthly reports and case studies.

Results: What have been the observed results of the project?

> ***"It is the first time a camp focused on sexual and reproductive health is being conducted in our village."–*** A group of girls from the village

A series of orientations and health camps were conducted in Ramechhap to raise awareness about HIV/AIDS, cervical cancer, uterine prolapse, and STIs. School and community sessions, along with the distribution of informative IEC materials, increased knowledge among participants on symptoms, preventive measures, and treatments. The foundation coordinated with local health posts and hospitals for follow-up treatments and nutritional support for clients in need. Overall, the program successfully engaged more than 137 women through community participation and coordination with local health authorities. Following were the key activities conducted.

School Orientation:

- Conducted a one-day school orientation at Seti Devi School, Ramechhap on HIV/AIDS, cervical cancer, uterine prolapse, and STIs.
- Included introductions, symptoms, preventive measures, treatments, and group activities.
- Emphasized the importance of screenings and tests.

Community Orientation**:**

- Coordinated with Doramba Rural Municipality and the local health post.
- Published and distributed IEC materials to enhance community awareness.
- Materials distributed through Female Community Health Volunteers (FCHV) and local influencers like teachers, health workers, and leaders.

Health Camp**:**

- 137 women participated.
- Free screenings and tests for cervical cancer, uterine prolapse, HIV, and STIs.
- 19.70% of participants were found with STI.
- 14.60% were found with uterine prolapse.
- 10.94% participants were inserted jedelle
- Pre-information disseminated via IEC materials and local influencers.
- Identified 20 uterine prolapse cases, 18 Jadelle insertion/removal cases, and 27 STI cases.
- Emergency support provided to 2 clients with uterine prolapse; 1 received nutritional support.
- No HIV or cervical cancer cases found, but breast and other cancers suspected.
- Nutrition support provided to 25 health camp clients, focusing on those undergoing therapies and operations.

Follow-up and Treatment**:**

- Coordinationed with health post and local municipality for patient transport to Kathmandu.
- Post-camp data shared with local authorities to raise awareness and responsibility.
- Ongoing follow-up and treatment for identified cases.
- Immediate medical and nutritional support provided for emergency cases, with coordination for further treatment in Kathmandu.
- Coordinated with Manmohan Memorial Medical College for free uterine prolapse services.
- Collaborated with Family Planning Association of Nepal, Manmohan Memorial Medical College, and Nepal Cancer Hospital for treatments.
- 8 clients received follow-up and emergency support.
- 21 clients received follow-up and primary support.
- 25 clients received nutritional support.

Contribution to results: Did the intervention make a difference i.e., play a role in bringing about the observed results? In particular, how and why has the intervention made a contribution?

The intervention contributed to the observed results by emphasizing the importance of screenings and tests, and effectively coordinating with Doramba Rural Municipality, local health posts, and FCHVs.

The widespread distribution of Information Education and Communication materials through FCHVs and community influencers enhanced awareness and encouraged participation. Free health screenings identified critical cases, which were then addressed through emergency and nutritional support. The program facilitated patient transport to Kathmandu and shared post-camp data with local authorities to ensure accountability and continued care. Collaborations with medical institutions like Manmohan Memorial Medical College and the Family Planning Association of Nepal provided essential treatments.

> ***"She urgently needed to undergo her third chemotherapy session but was unable to do so due to financial difficulties. She was brought to Kathmandu for advanced treatment, where she was accompanied by a staff member throughout the process. She also received nutritional support to aid her recovery and was safely returned to her village."–*** Case study shared by Shanti Foundation

What factors are needed for the intervention to make a contribution?

Based on the feedback from participants, several key factors are essential.

- Ongoing orientation programs are needed to address the knowledge gaps among students regarding diseases like HIV/AIDS, cervical cancer, uterine prolapse, and STIs.
- Training for school professors is crucial so they can further disseminate accurate information to their students.
- Strong community support and unity, as evidenced by the participants' commitment to spreading awareness, are vital for the program's success.
- Support from local authorities, such as the acknowledgment and backing from the Mayor of Gunshal Municipality, ensures sustainability.
- Effective coordination with local health posts for follow-up and encouraging patients to seek further treatment in Kathmandu are necessary for comprehensive care and treatment continuity.

Other influences: What other influencing factors were at play?

> ***"Most of the women in the village were unable to express their sexual and reproductive health issues due to a lack of education and the presence of male health workers at the health post and hospitals."–*** A woman who received service at the health camp

Several factors influenced the intervention's impact.

- Participants had limited knowledge about diseases like HIV, cervical cancer, uterine prolapse, and STIs, often believing misconceptions such as HIV being transmitted through shared toilets and clothing.
- No previous health camps had been conducted in Gunshal Municipality, contributing to a lack of awareness and healthcare access.

- Cultural barriers and misinformation, such as the belief that services which are not free are financially very expensive, discouraged women from seeking medical help.
- Geographical and economic constraints also hindered access to healthcare, particularly for treatments requiring travel to Kathmandu.
- Gender-based violence and traditional gender roles further restricted women's autonomy and ability to seek medical attention.
- Many women prioritized household duties over health, and the presence of male health workers deterred them from reproductive health check-ups.
- High migration rates resulted in absent of male family members who could have provide support.
- Poor hygiene and sanitation practices, coupled with insufficient sexual and reproductive health education, led to widespread health issues, including untreated cases of uterine prolapse and STIs.

Sustainability: Are the results achieved sustainable?

The sustainability of the results appears promising, but several critical factors need to be addressed to ensure long-term impact.

- Continued education and awareness programs are essential, including regular school and community orientation sessions, and training for teachers and community leaders to maintain and enhance knowledge about HIV/AIDS, cervical cancer, uterine prolapse, and STIs.
- Empowering FCHVs and local health workers with ongoing support and updated educational materials will ensure accurate information dissemination.
- Strengthening local health infrastructure through collaboration with health posts and municipalities is crucial to providing accessible and local screening and treatment facilities, reducing the need for travel to Kathmandu.
- Efforts to overcome cultural barriers and misinformation should be sustained through community engagement and sensitization programs involving local influencers and leaders.
- Establishing support systems for women, particularly those facing gender-based violence and economic constraints, is essential, including creating safe spaces and providing economic support.
- Continuous monitoring and follow-up with participants, along with community involvement and ownership of health programs, will ensure sustained engagement and improvements.
- Securing ongoing support from local authorities, health institutions, and NGOs will help sustain the interventions through financial backing, policy support, and technical assistance.

Lessons: What lessons on bringing about long-term change can be learned for future program implementation?

There are several lessons for future implementation of interventions of such nature.

- Continuous education and training are vital for maintaining awareness and knowledge about key health issues.
- Strong community support and involvement ensure program sustainability and effectiveness.

- Overcoming cultural barriers and misinformation through sustained engagement and accurate information dissemination is crucial.
- Strengthening local health infrastructure and ensuring accessible treatment options reduce reliance on distant healthcare facilities.
- Establishing robust support systems for vulnerable women enhances their ability to seek and receive medical care.
- Continuous monitoring, follow-up, and collaboration with local authorities and health institutions ensure sustained health improvements and accountability.

Likely future impact: Is it likely the intervention will make a contribution to results in the future?

It is likely that the intervention will make a positive contribution to health outcomes in the future. The project successfully raised awareness and knowledge about HIV/AIDS, cervical cancer, uterine prolapse, and STIs through a series of orientations and health camps. The engagement of over 137 women and the collaboration with local health authorities and community influencers have been significant in achieving these results.

The intervention has effectively addressed immediate health needs through free screenings, follow-up treatments, and nutritional support. The coordination with local health posts, hospitals, and medical institutions like Manmohan Memorial Medical College and the Family Planning Association of Nepal ensured that identified cases receive the necessary care and treatment. This comprehensive approach provided immediate relief but also laid the foundation for sustained health improvements. Considering the positive outcomes observed so far, it is highly likely that the intervention will continue to make a significant contribution to health outcomes in the future. The project's comprehensive approach, strong community involvement, and effective coordination with local health authorities and medical institutions provide a robust foundation for sustained health improvements.

Conclusion and Recommendations

The projects funded by ANMF demonstrate a strong alignment with its mission to strengthen Nepal's medical capabilities, particularly through enhancing technical skills, supporting improvement/development of medical infrastructure, and responding to health emergencies. However, it is important to consider that the institutions and organizations working to improve health care service delivery in Nepal often does not have required budget/resources, capacity, and governance mechanism to sustain the projects funded by ANMF. Thus, each project funded by ANMF demands a long-term support and oversight from ANMF to ensure that funded projects achieve sustainable outcomes in terms of advancing healthcare in Nepal. Following project specific conclusions and recommendations sheds light on activities that can be done to ensure that.

Health Infrastructure Enhancement

Health Post Rebuilding Project

Results	The project aimed to restore and enhance healthcare services in rural communities and earthquake-affected regions of Nepal. Several health posts were constructed in Sindhupalchowk, Dolakha, Nuwakot, Kaski, and Myagdi districts and are providing essential basic healthcare services like immunizations, outpatient care, emergency services, and maternal care.
Sustainability	The sustainability of the project depends upon addressing several critical factors including inclusive planning, continuous monitoring, supply of essential resources, skill development, digital transition, and flexible funding.
Likely Future Impact	The intervention is likely to make a meaningful contribution to future healthcare outcomes if key improvements are implemented. These include fostering inclusive planning processes, enhancing monitoring and oversight, ensuring adequate material and equipment supply, emphasizing continuous skill development and training, transitioning to digital systems, and seeking/adopting flexible funding approaches.

Oxygen Plant TUTH

Results	The installation of the TUTH has enabled the hospital to supply oxygen directly to critical areas such as the Operation Theater, ICU, and MICU. TUTH has been able to lower its expenses on oxygen procurement and provide oxygen to patients free of charge, unlike many private hospitals. The local production of oxygen has also reduced supply chain disruptions caused by natural calamities, ensuring a steady and reliable oxygen supply during crises.
Sustainability	The project's sustainability hinges on several critical factors. Regular maintenance and training of technical personnel are essential to ensure the plant's continuous and efficient operation. Establishing a dedicated governance mechanism to oversee the plant's operation, timely repairs, and adherence to maintenance schedules is important. The lack of skilled technical staff and the dependency on external vendors for maintenance have been notable challenges.
Likely Future Impact	Sustained maintenance and operation, effective governance and oversight, addressing training gaps, and planning for long-term sustainability are crucial for the plant's continued contribution to patient care. By incorporating these lessons and maintaining a

	proactive approach to managing the plant, TUTH can secure a reliable oxygen supply for its patients.

There have been notable strides in improving healthcare access and service delivery in Nepal through infrastructure enhancement. Addressing following recommendations is crucial to ensure impact and sustainability.

Recommendations:

Inclusive Planning and governance mechanisms	Health Post Rebuilding Project: Ensure that all relevant stakeholders, including local health posts, Community-Based Organizations (CBOs), and local communities, are actively involved in the planning and decision-making process. This approach will help tailor interventions to meet actual community needs and improve sustainability and overall effectiveness. Foster community involvement through awareness campaigns, feedback mechanisms, and participatory decision-making processes. Empower local communities to take ownership of health interventions.
	Oxygen Plant Project: Establish governance mechanisms or technical committees to oversee the planning, construction, and operation of the oxygen plant. This will ensure accountability and effective management.
Monitoring and Oversight	Health Post Rebuilding Project: Implement a robust monitoring system with regular visits including elected representatives and local, provincial and federal health officials. This will help build ownership, address emerging issues, and adapt strategies as needed.
	Oxygen Plant Project: Improve oversight by monitoring vendor performance closely and addressing delays promptly. Ensure that a governance structure is in place to provide ongoing oversight and accountability.
Regular Maintenance and Skill Development	Health Post Rebuilding Project: Address equipment/resource shortages by advocating to local, provincial, and federal government. Provide regular training opportunities for healthcare personnel.
	Oxygen Plant Project: Allocate budget and resources for regular maintenance and repairs. Ensure that staff receive up-to-date training on plant operations and maintenance.
Flexible and Needs-Based Funding	Health Post Rebuilding Project: Advocate to increase funding on local healthcare service delivery and for more flexible funding mechanisms that allow adjustments based on local needs and priorities. Encourage local governments to allocate additional resources for identified health interventions.
	Oxygen Plant Project: Ensure that funding covers both the initial installation and ongoing maintenance costs. Allocate resources for technical support and training to support long-term sustainability.
Knowledge Sharing and Best Practices	Health Post Rebuilding Project: Facilitate workshops and seminars to share best practices and successful examples with health post staff from different regions. Promote the adoption of proven international/national methods to enhance service delivery.
	Oxygen Plant Project: Share experiences and lessons learned with other hospitals and stakeholders to promote effective use and management of oxygen plants.

Capacity Building in Healthcare

Pediatric Critical Care Fellowship

Results	The program has been highly successful in addressing the critical shortage of pediatric care specialists in Nepal. Dr Puja's efforts included revising protocols for managing critically ill children, introducing point-of-care ultrasonography and echocardiography, establishing Nepal's first pediatric critical care fellowship, setting up a pediatric high dependency unit, implementing simulation-based learning, and conducting regular quality assessments and morbidity and mortality meetings. These initiatives have the great potential to substantially improve the quality of care for critically ill children at PAHS.
Sustainability	PAHS has shown strong institutional support for professional development, providing a conducive environment for the implementation of advanced practices and protocols learned during the fellowship. The establishment of new infrastructure, such as the pediatric high dependency unit, and the introduction of advanced medical technologies have strengthened PAHS's capacity to deliver high-quality care. The initiation of Nepal's first pediatric critical care fellowship ensures a continuous pipeline of well-trained professionals. Dr. Puja's collaborations with local and international organizations, commitment to continuous education, and role in leadership and mentorship further reinforce the sustainability of these interventions.
Likely Future Impact	The program is likely to continue making a significant contribution to advancing pediatric critical care in Nepal. The foundational improvements in protocols, infrastructure, and training established by Dr. Puja Amatya are set to have a lasting impact on the quality of care at PAHS.

ANMF-NCCDF CCNTP Scholarship

Results	The program successfully trained ten critical care nurses from various hospitals outside Kathmandu Valley. The program provided hands-on training and enhanced communication skills. The trained nurses have introduced best practices for infection prevention and patient care in their respective ICUs. The program has contributed to enhancing critical care services across different regions of Nepal.
Sustainability	The sustainability of the CCNTP results is supported by several factors, including the commitment of participants to work at their respective institutions for at least two years, high-quality training, and practical hands-on experience. Potential risks such as the need for ongoing support, maintaining a pool of qualified trainers, and overcoming institutional resistance should be addressed. Continuous monitoring, follow-up training, and efforts to secure government and broader institutional endorsement will be key to sustaining the positive outcomes of the CCNTP.
Likely Future Impact	The CCNTP is likely to continue making a significant contribution to advancing critical care in Nepal. The program's design, practical training emphasis, and strong commitment of participants and trainers create a robust foundation for sustained impact. To ensure long-term success, it is essential to provide ongoing support, continuous professional development, and efforts to secure broader institutional and government endorsement.

Both programs demonstrated their capacity to make a significant contribution to critical care in Nepal. They are likely to have a lasting impact on improving critical

care practices and patient outcomes across the country. Addressing the recommendations outlined will be crucial in sustaining and enhancing these positive outcomes in the future.

Strengthen Institutional Support	Pediatric Critical Care Fellowship: Continue to build on PAHS's commitment by fostering collaborations with other institutions and organizations to expand training opportunities and support.
	ANMF-NCCDF CCNTP scholarship: Advocate for government and broader institutional support to enhance the program's credibility and impact.
Expand Fellowship and Training Programs	Pediatric Critical Care Fellowship: Consider replicating the fellowship model in other teaching hospitals of Nepal to address gaps in pediatric critical care expertise nationwide.
	ANMF-NCCDF CCNTP scholarship: Increase the number of training programs to reach more regions and healthcare facilities, ensuring that critical care expertise is distributed more evenly across the country.
Enhance Practical Training and Mentorship	Emphasize hands-on training and real-world application of skills. Establish ongoing mentorship and support systems to help trainees continuously improve and adapt to evolving clinical practices.
Implement Continuous Monitoring and Evaluation	Develop monitoring and evaluation system to inform the evidence-based program design, assess the long-term impact, identify areas for improvement, and ensure that the interventions remain effective and relevant.
Address Institutional and Cultural Barriers:	ANMF-NCCDF CCNTP scholarship: Advocate for the recognition and integration of training programs within institutional policies.
Foster Collaborations and Partnerships	Pediatric Critical Care Fellowship: Leverage existing networks and form new partnerships with international and local experts to support ongoing professional development and knowledge sharing. ANMF-NCCDF CCNTP scholarship: Strengthen collaborations with government bodies, healthcare institutions, and international organizations to secure resources and support for the program.
Promote Professional Development and Continuous Learning	Pediatric Critical Care Fellowship: Create a platform for fellowship graduates to attend international conferences to stay updated with the latest practices. ANMF-NCCDF CCNTP scholarship: Ensure that trained nurses have access to continuous learning opportunities to maintain and enhance their skills.

Preventive Health Initiatives

Kathmandu Eye Study

Results	The Kathmandu Eye Study is a pioneering large-scale ocular research project in Nepal. Despite delays, the study's systematic approach and collaboration with local authorities and health volunteers have laid a strong foundation for generating valuable data on eye disease prevalence. This data is expected to inform future healthcare policies and strategies.
Sustainability	The study's methodology, including cluster sampling, comprehensive training, and community involvement, ensures reliable data collection and enhances the study's validity. Continued engagement with local authorities and FCHVs, along with proactive community awareness efforts, fosters a sense of ownership and participation among local stakeholders. However, the delay in report completion and the lack of

	involvement of government officials in the analysis phase may impact the timely application and replicability of the findings.
Likely future impact	The comprehensive data generated by the study will provide critical insights into the prevalence of eye diseases in urban areas. By addressing the lessons learned and ensuring continuous engagement with stakeholders, the study's outcomes can be successfully translated into improved eye care services and policies, ultimately advancing healthcare in Nepal. The study's potential to inform future healthcare strategies makes it a valuable intervention with a likely lasting impact on public health.

Community Health Strengthening

Results	The project successfully engaged over 137 women. Critical health issues were identified and addressed, and emergency and nutritional support was provided to those in need. The project's comprehensive approach and collaboration with local health authorities and medical institutions ensured that identified cases received necessary care and treatment.
Sustainability	The sustainability of the project's results is promising. Establishing support systems for vulnerable women and securing ongoing support from local authorities, health institutions, and NGOs will help sustain the interventions through financial backing, policy support, and technical assistance. Continuous monitoring, follow-up, and community involvement will ensure sustained engagement and improvements.
Likely Future Impact	It is highly likely that the intervention will continue to make a significant positive contribution to health outcomes in the future. The project's comprehensive approach, strong community involvement, and effective coordination with local health authorities and medical institutions provide a robust foundation for sustained health improvements. By addressing immediate health needs through free screenings, follow-up treatments, and nutritional support, the project has laid the groundwork for continued health improvements.

Both projects highlight the importance of robust methodologies, community involvement, and effective coordination with local health facilities. However, to achieve their full potential and ensure sustainable impact, several areas for improvement have been identified.

Set up stringent project management practices	Kathmandu Eye Study: Establish clear milestones, regular progress reviews, and accountability mechanisms to avoid delays in project completion.
Ongoing comprehensive support and training programs	Kathmandu Eye Study: Develop detailed training programs and refresher courses for all involved personnel to maintain high standards in data collection. Community Health Strengthening: Provide ongoing support and updated educational materials to FCHVs and local health workers to ensure accurate information dissemination and effective community engagement. Conduct regular school and community orientation sessions, and train teachers and community leaders to maintain and enhance knowledge about HIV/AIDS, cervical cancer, uterine prolapse, and STIs. Establish support systems, including safe spaces and economic support, for women facing gender-based violence and economic constraints to enhance their ability to seek and receive medical care. Address knowledge gaps through ongoing orientation programs and training for school teachers to disseminate accurate information to students. Secure ongoing support from local authorities,

	health institutions, and NGOs to sustain interventions through financial backing, policy support, and technical assistance.
Government and Community Engagement	Kathmandu Eye Study: Engage local leaders and stakeholders early and continuously in the research process to build trust and encourage active participation. Include government representatives in all phases of the research, from planning to data analysis and implementation, to enhance their sense of ownership and commitment to implementing findings. Develop long-term relationships with key stakeholders to ensure ongoing support and collaboration, enhancing the sustainability and impact of future programs. Community Health Strengthening: Sustain community engagement and sensitization programs involving local influencers and leaders to address cultural barriers and misinformation. Collaborate with health posts and municipalities to provide accessible and local screening and treatment facilities, reducing the need for travel to distant healthcare facilities.
Robust approach and methodology	Kathmandu Eye Study: Integrate secondary data analysis beyond CBS data and include global best practices into the planning phase of future studies to ensure demographic representativeness and efficient resource utilization. Develop strategies to minimize non-response, such as follow-up protocols and participant incentives, to ensure robust sample sizes. Develop implementation plans alongside research projects, detailing how findings will be translated into practice, and ensure continuous monitoring and evaluation to adapt strategies as needed. Community Health Strengthening: Ensure continuous monitoring and follow-up with participants, along with community involvement and ownership of health programs, to ensure sustained engagement and improvements.
Dissemination	Kathmandu Eye Study: Create a dissemination plan that includes timelines for sharing preliminary findings and final reports with stakeholders to ensure prompt and effective utilization of research outcomes. Regularly update donors on the study's progress and actively involve them in the dissemination of findings to enhance trust and potentially attract additional funding for successful implementation. Community Health Strengthening: Develop and implement a dissemination plan that includes timelines for sharing findings with local authorities, health institutions, and community members to ensure prompt and effective utilization of outcomes.