



A Report on Chronic Obstructive Pulmonary Disease (COPD) Screening Camp in Rasuwa.



ELF



HEALTH CARE ASSOCIATION OF NEPAL

स्वास्थ्य सेवा संघ नेपाल

निःशुल्क स्वास्थ्य जाँच शिविर

दीर्घकालीन अवरोधात्मक फोक्सो रोग (COPD) परीक्षण
मधुमेह तथा उच्च रक्तचाप परीक्षण

📍 स्थान: कालिका गाउँपालिका, रसुवा

📅 मिति: माघ १४-१६

सहयोग



ELF

सहकार्य



Date: Magh 14- Magh 16

Venue: Health Post and Outreach Clinics, Ward 1,2,3 Rasuwa.

Submitted By:

Health Care Association of Nepal.

Submitted To:

European Lung Foundation

In collaboration with:

Kalika Rural Municipality

Acknowledgement

Firstly, we extend our sincere gratitude to Kalika Rural Municipality, Rasuwa for their support and collaboration, which was crucial in facilitating the screening and outreach activities in Ward 1, Ward 2, and Ward 3.

We would like to thank the staff of the Health Post and Outreach Clinics for providing the venue and logistical support throughout the project, ensuring smooth implementation of all activities.

Our heartfelt appreciation goes to NIRI for their valuable technical guidance during the spirometry-based screening process. We are also deeply grateful to the European Lung Foundation for their generous financial support, which made this initiative possible.

We wish to acknowledge the dedication and hard work of all the volunteers, whose commitment and tireless efforts significantly contributed to the success of the project.

Finally, we sincerely thank all the participants/respondents who took part in the screening and outreach activities; without their cooperation and willingness, this project would not have been possible.

Field Team

| Name | Qualification | Post |
|-----------------------|--|--------------------------------|
| Dr. Prajwal Bhandari | Bachelor of Medicine, Bachelor of Surgery (MBBS) | Executive Director of HCAN |
| Bishesh Bhatta | Bachelor of Public Health (BPH) | Administrative Officer at HCAN |
| Sujan Thapa | Bachelor of Public Health (BPH) | Project Coordinator |
| Shristi Subedi | Bachelor of Public Health (BPH) | Project Vice Coordinator |
| Dr. Amit Kumar Mandal | Bachelor of Medicine, Bachelor of Surgery (MBBS) | Medical Officer |
| Dr. Kiran K.C. | Bachelor of Medicine, Bachelor of Surgery (MBBS) | Medical Officer |
| Anisha Chaudhary | Bachelor of Public Health (BPH) | Communication Officer |
| Sujal Bashyal | Bachelor of Public Health (BPH) | Implementation Officer |
| Bibha Sah | Bachelor of Public Health (BPH) | Health Assistant |

Introduction

Chronic Obstructive Pulmonary Disease (COPD) is a leading cause of morbidity and mortality in Nepal, with low awareness about prevention, early detection, and proper management in rural communities.

The Health Care Association of Nepal (HCAN), in collaboration with Kalika Rural Municipality and supported by ELF, organized a three-day COPD screening camp across Wards 1, 2, and 3 of Kalika Rural Municipality from Magh 14 to Magh 16, 2082. The camp aimed to raise awareness, provide screening, and counsel participants on lung health and COPD management.

Camp Objectives

General Objective:

- To assess and raise awareness of COPD in the community and facilitate early detection.

Specific Objectives:

- To screen community members for COPD using CAT protocol, mMRC scale, and spirometry.
- To counsel participants regarding smoking cessation, protection from indoor air pollution, and the installation of improved cookstoves.
- To provide education on proper inhaler use for already diagnosed COPD patients.
- To initiate pulmonary rehabilitation exercises for symptomatic patients or participants with high pack-years (>10).
- To distribute IEC materials to participants to raise awareness about COPD, lung health, and preventive measures.

Methodology

Screening Protocol:

1. **Participant Registration**
2. **Anthropometric Measurements:** Height (stadiometer), Weight (weighing balance), BMI calculation
3. **Vital Signs:** Blood pressure and random blood sugar measurement
4. **COPD Assessment:** CAT protocol and mMRC scale
5. **Data Entry:** KOBO digital platform
6. **General Counseling:** By medical officers regarding lung health, smoking cessation, indoor air pollution, and proper use of inhalers

7. **Spirometry Screening:** Using Easy on PC spirometer for participants who qualified based on CAT/mMRC or risk factors
8. **Distribution of IEC Materials:** All participants received IEC materials containing information about COPD, lung health, smoking cessation, indoor air pollution, and pulmonary rehabilitation exercises

Interventions for Screen-Positive Participants:

- Counseling for smoking cessation and protection from indoor air pollution
- Installation of improved cookstoves
- Mentorship on correct inhaler use for diagnosed COPD patients
- Pulmonary rehabilitation for symptomatic patients and participants with pack-year >10, including daily 5-min exercises (morning, afternoon, evening) with breathing techniques and raising the spirometry ball with rest intervals

Camp Schedule and Participation

| Date | Ward | Registered Participants | Spirometry Performed |
|-------------|-------------|--------------------------------|-----------------------------|
| Magh 14 | Ward 2 | 80 | 60 |
| Magh 15 | Ward 3 | 160 | 120 |
| Magh 16 | Ward 1 | 80 | 50 |

Key Findings

- **Community Awareness:** Almost all participants were unaware of the effects of smoke (tobacco or indoor air pollution) on lung health, airway narrowing, tar deposition, and nicotine impact on the brain.
- **Screening Outcomes:** Spirometry identified several participants at risk of COPD. Screen-positive participants were counseled regarding preventive measures, smoking cessation, and installation of improved cookstoves.
- **Pulmonary Rehabilitation:** Symptomatic patients and those with pack-years >10 were trained on daily 5-minute pulmonary exercises to improve lung function.
- **Education and IEC Materials:** All participants received IEC materials to reinforce the knowledge provided during the camp and encourage long-term behavioral changes.

Conclusion

The three-day COPD screening camp successfully reached over 300 community members across three wards. The camp not only facilitated early detection of COPD but also improved awareness regarding the harmful effects of smoking and indoor air pollution. Participants were motivated to adopt healthier practices such as smoking cessation, installation of improved cookstoves, pulmonary rehabilitation exercises, and using IEC materials for ongoing guidance.

Photos



