



Acceptability, Feasibility, and Appropriateness of Police-Based Basic Life Support Training and Public-Space AED Integration in Nepal: A Mixed-Methods Implementation Evaluation

PRESENTED BY:

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Background

- ▶ Out-of-hospital cardiac arrest (OHCA) is a major cause of preventable death globally and in Nepal.
- ▶ Survival depends on early CPR and defibrillation, but Nepal has
 - ▶ Underdeveloped prehospital EMS
 - ▶ Limited public awareness and response systems
- ▶ Police officers often act as first responders in emergencies.

Background

- ▶ Critical gap: Police are not routinely trained in BLS (CPR and choking).
- ▶ A pilot police-based BLS training program (2023):
 - ▶ Showed improved knowledge and skills
 - ▶ Well accepted by participants
- ▶ National scale-up discussions have already started (MoU signed with the Nepal APF on April 21, 2025).

Objective

- ▶ General Objective: To evaluate the feasibility, acceptability, and appropriateness of a police-based BLS training program in Nepal
- ▶ Specific Objectives:
 - ▶ Assess perceptions of BLS training among:
 - ▶ Frontline police officers
 - ▶ Leadership and stakeholders
 - ▶ Explore feasibility of AED integration in
 - ▶ Police response systems
 - ▶ Public spaces

Methodology

- ▶ Study design:
 - ▶ Pilot mixed-methods implementation evaluation
 - ▶ Guided by Proctor's Implementation Outcomes Framework
 - ▶ Focus: acceptability, appropriateness, feasibility
- ▶ Study Setting and Participants:
 - ▶ Conducted in Kathmandu
 - ▶ Participants: trained police officers, police leadership, municipal/government stakeholders

Methodology

- ▶ Data Collection:
 - ▶ Quantitative: structured survey (confidence, acceptability, willingness, AED perception)
 - ▶ Qualitative:
 - ▶ FGDs: frontline experience
 - ▶ IDIs: leadership and system-level insights

Methodology

- ▶ Data Analysis:
 - ▶ Quantitative: Descriptive statistics only
 - ▶ Qualitative: Thematic analysis
- ▶ Integration of findings for implementation insights

Results: Quantitative Findings (Survey, n=40)

- ▶ 87.5% confident in performing CPR
- ▶ 84.4% believe general public can learn BLS
- ▶ 78.1% more likely to respond in emergencies
- ▶ 98.3% recognize usefulness of AEDs

Results: Qualitative Findings (FGDs + IDIs)

- ▶ High Acceptability and Appropriateness: Strong support from:
 - ▶ Police officers
 - ▶ Healthcare professionals
 - ▶ Municipal leaders

Results: Qualitative Findings (FGDs + IDIs)

- ▶ Real world impact: One trainer successfully saved a child using choking management.

Results: Qualitative Findings (FGDs + IDIs)

- ▶ Support for AED Integration: Stakeholders view AEDs as:
 - ▶ Necessary
 - ▶ Feasible next step

Results: Qualitative Findings (FGDs + IDIs)

- ▶ Key Implementation Barriers:
 - ▶ Policy integration required
 - ▶ Budget constraints
 - ▶ Infrastructure limitations
 - ▶ Need for sustained community engagement

Results: Qualitative Findings (FGDs + IDIs)

- ▶ High Acceptability and Appropriateness: Strong support from:
 - ▶ Police officers
 - ▶ Healthcare professionals
 - ▶ Municipal leaders

Conclusion: Key Findings

- ▶ Police-based BLS training in Nepal is:
 - ▶ Acceptable
 - ▶ Appropriate
 - ▶ Feasible (at pilot level)
- ▶ Strong stakeholder support across:
 - ▶ Frontline officers
 - ▶ Leadership
 - ▶ Municipal level

Conclusion: Practical Implications

- ▶ Police can serve as a viable first-responder network in low-resource settings.
- ▶ Scaling-up can strengthen early OHCA response in resource-limited settings.
- ▶ AED integration is supported and represents a logical next step.

Conclusion: Reality Check

- ▶ Scale-up requires:
 - ▶ Policy-level integration
 - ▶ Dedicated funding
 - ▶ Infrastructure development
 - ▶ Ongoing training and community engagement

Conclusion: Takeaway Messages

- ▶ This pilot study provides early implementation evidence that police-based BLS programs (CPR and choking first aid) are a promising strategy to strengthen prehospital emergency care in Nepal, but larger, multisite studies are essential before national scale-up.
- ▶ Policy support, sustainable financing, and system integration are essential for national implementation.

Acknowledgment

- ▶ We would like to gratefully acknowledge the support, guidance, and contributions of everyone who made this work possible:
 - ▶ Nepal Armed Police Force (APF) and their participating officers
 - ▶ Collaborating institutions and municipal authorities
 - ▶ Ministry of Health and Population

About the Presenter



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Incoming PGY-1 Resident, MD Anesthesiology and Critical Care, BPKIHS

- ▶ Coordinator, Nepal Life Savers Program (NLSP), HAPSA Nepal (since May 2025)
- ▶ Trained approx. 1,600 individuals under the NLSP initiative, including 1,300 police personnel, in hands-only CPR and choking first aid