BUMJ
Benghazi University Medical journal
Faculty of Medicine, University of Benghazi
VOLMUE:3 ISSUE:1 June: 2026

A National Primary PCI Network in Libya: An Urgent Health Policy Imperative.

Ali M. Elneihoum * MD, PhD, FESC.

Letter to Editor

Dear Editor

Cardiovascular disease remains the leading cause of death in Libya, accounting for approximately 37% of total mortality, according to the World Health Organization 2023 country profile [1]. Among these, acute coronary syndromes (ACS)—particularly ST-elevation myocardial infarction (STEMI)—represent a time-critical condition where survival is directly dependent on rapid access to reperfusion therapy. Yet in Libya, access to primary percutaneous coronary intervention (PCI), the gold-standard treatment, remains inconsistent, fragmented, and largely confined to a few urban centers.

This gap is no longer simply a clinical issue—it is a national health system failure that demands urgent policy intervention.

Regional experience provides compelling evidence that improvement is both feasible and impactful. In Egypt, the implementation of coordinated STEMI networks significantly increased primary PCI utilization and reduced in-hospital mortality by more than 50% [2]. Similarly, in Morocco, national registry data have identified delayed reperfusion and limited PCI access as key drivers of mortality, prompting structured efforts to expand timely intervention [3]. In Saudi Arabia, nationwide registries have demonstrated that organized STEMI care systems can improve both access and outcomes across diverse geographic regions [4].

These regional experiences offer a clear message: the challenge is not the lack of capability, but the absence of organization. Libya already possesses the foundational elements—trained cardiologists, catheterization laboratories in major cities, and an evolving healthcare system. What is lacking is a coordinated national framework to ensure timely reperfusion.

We therefore call upon the Libyan Ministry of Health to adopt a clear, actionable national strategy for STEMI care centered on primary PCI. This strategy should include:

- Designation of regional PCI-capable centers operating 24/7 within a hub-and-spoke network
- Integration of emergency medical services (EMS) with pre-hospital ECG transmission and direct catheterization laboratory activation
- National STEMI registry establishment to monitor performance, outcomes, and delays
- Public awareness campaigns to reduce patient-related delays in seeking care
- Investment in workforce training and retention, particularly in interventional cardiology and emergency care

Importantly, international guidelines from the European Society of Cardiology emphasize that primary PCI should be delivered within 120 minutes of first medical contact to achieve optimal outcomes [5]. Without a coordinated national framework, this

* Professor, Faculty of Medicine, Benghazi University.
President Hespereds University, Benghazi.
President Libyan Cardiac Society.
Email: president@hu.edu.ly.

DOI: https://doi.org/10.37376/benunivmedj.v3i1.7889

Copyright©2024University of Benghazi.This open Access article is Distributed under a CC BY-NC-ND 4.0 license. ISSN: Online 3005-7450, ISSN:Link 3005-7442

target will remain unattainable for the majority of Libyan patients.

The cost of inaction is measured in preventable deaths, heart failure, and lost economic productivity. Conversely, investment in a national primary PCI program represents one of the most cost-effective strategies to reduce premature mortality from non-communicable diseases in Libya.

In conclusion, the establishment of a nationwide primary PCI network is not merely a clinical upgrade—it is a public health imperative and a test of health system leadership. The evidence is clear, the regional models are available, and the need is urgent. The time for decisive policy action is now.

REFERENCES

1. World Health Organization. Noncommunicable Diseases Country Profile: Libya 2023. Geneva: WHO; 2023.

2. Shaheen SM, Abdelaziz HK, El-Menyar A, et al. Impact of implementing a regional STEMI network on reperfusion strategies and outcomes in Egypt. Global Heart. 2023;18(1):15–24. doi:10.5334/gh.1134

3. El Bakkali M, Khatouri A, Boukhris M, et al. Management of ST-elevation myocardial infarction in Morocco: insights from the Moroccan Registry of Myocardial Infarction (MR-MI). BMC Cardiovasc Disord. 2023;23:458. doi:10.1186/s12872-023-03458-7

4. AlHabib KF, Sulaiman K, Al-Motarreb A, et al. Baseline characteristics, management practices, and outcomes of patients with acute myocardial infarction in Saudi Arabia: results from the Saudi Acute Myocardial Infarction Registry (STARS). PLoS One. 2019;14(5)

5. European Society of Cardiology. 2023 ESC Guidelines for the management of acute coronary syndromes in patients presenting with ST-segment elevation. Eur Heart J. 2023;44(38):3720–3826.

Copyright©2024University of Benghazi.This open Access article is Distributed under a CC BY-NC-ND 4.0 license. ISSN: Online 3005-7450, ISSN:Link 3005-7442
https://journals.uob.edu.ly/index.php/BUMEJ/index DOI: https://doi.org/10.37376/benuivmedj.v3i1