Competency In Recognition of Cardiac Arrhythmia in Kenya (CIRCAK)

Kimani Brian, Gitura Hannah, Thairu Benjamin, Mwende Mercy, Otieno George, Keller Michael, Lee Burton.

INTRODUCTION

- Cardiac arrhythmias are a common occurrence, especially in emergency and critical care settings.
- Prompt and accurate recognition of these arrhythmias is critical for timely and effective treatment, ultimately impacting patient outcomes.
- However, healthcare workers' knowledge of arrhythmias varies considerably and this affects their recognition of arrythmias.
- Factors influencing the knowledge include experience, training, and frequency of exposure.
- This knowledge gap poses a significant challenge to optimal patient care and highlights the need for improved training and assessment strategies.
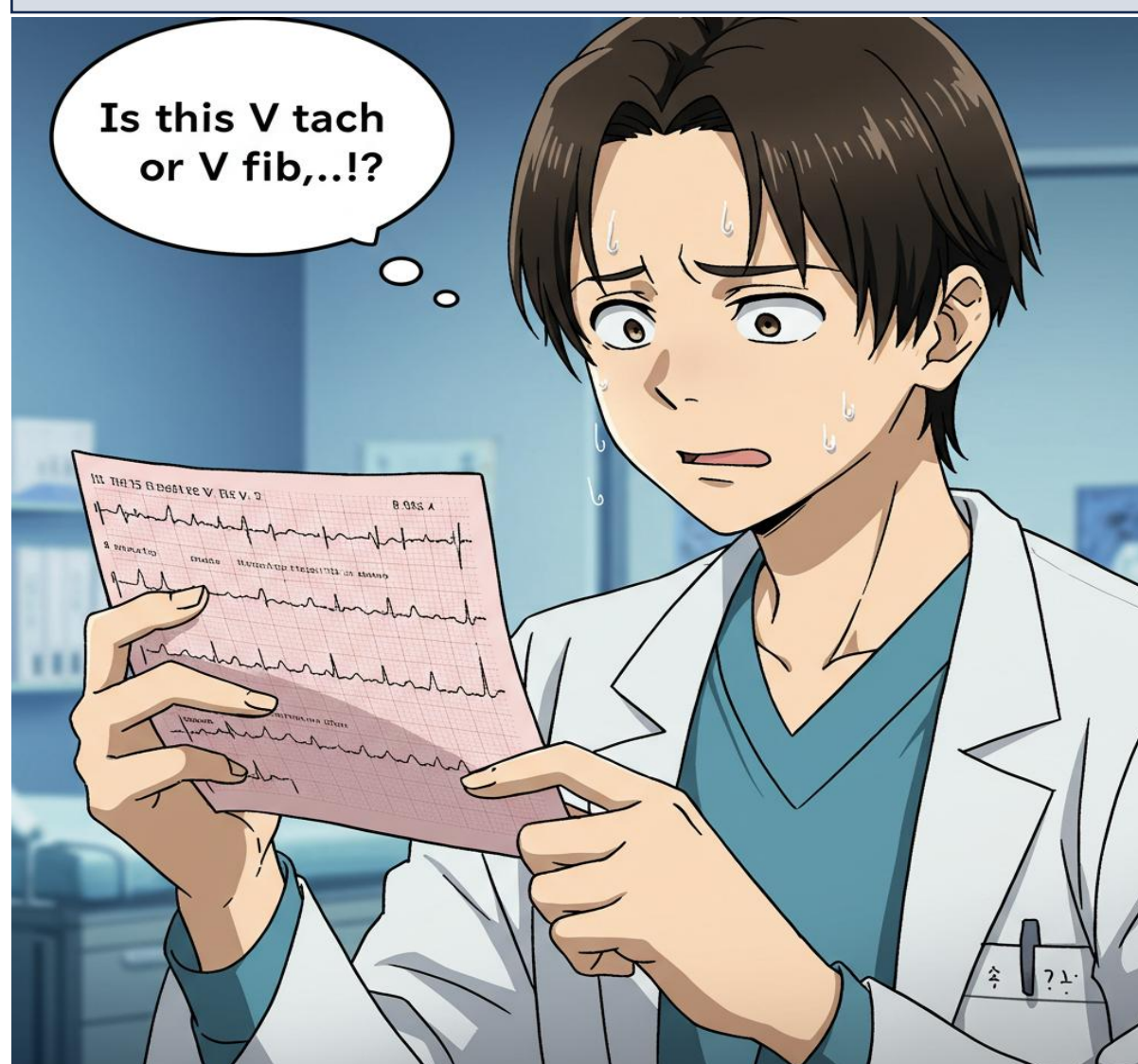
OBJECTIVES

- Assess the knowledge of cardiac arrhythmias among healthcare workers and students in Kenya
- Assess factors related to accurate arrythmia recognition

GOAL

- Identifying knowledge gaps and developing targeted educational interventions

Methods

- Where
  - AIC Kijabe hospital – a 360 rural tertiary facility
  - Kenya Medical Training College (KMTC) –ECCCO students
- All willing health care workers(HCWs) with an arrythmia recognition training including
  - ECCCO - Graduates and Students
  - Medical officer - Interns and Graduates,
  - Clinical officer - Interns and Graduates,
  - Consultants and Residents (Anesthesia, Family Medicine, General Surgery and internal medicine)
  - Nurses (ICU, HDU, OR, ED)
  - KMTC ECCCO students
- Consecutive enrollment started in January 2025 and is ongoing
- A timed validated test with 30 questions with different ECG strips is administered.
- Demographic data including name, gender, cadre, place of work, years of experience and level of confidence in arrythmia recognition will be collected

> Is this V tach or V fib,..!?

Analysis and Results

- Analysis will be done with STATA
- A paired T-test will be attempted from the baseline and post intervention using the name.
- Analysis of interpretation per arrythmia class (Basic, Intermediate and Advanced)
- Average of each class and group will be reported

References

Keller, K. B., & Raines, D. A. (2005). Arrhythmia knowledge: A qualitative study. *Heart & Lung: The Journal of Critical Care*, 34(5), 309–316. https://doi.org/10.1016/j.hrtlng.2005.05.001