

# Hypertension Knowledge Development in Africa: Clinical Trials for Africa

Pan African Society of Cardiology

With the technical support of  
Guidelines International Network  
African Community

# Summary

- Hypertension contributes to a significant burden of disease within the African region.
- Generating local evidence provides knowledge that is more relevant to decision making within this community.
- We found a total of 84 clinical trials, including 43 RCTs conducted in 18 countries.
- There is need to evaluate the quality of these studies.

# Abbreviations

- Clinical Trials – CT
- Hypertension – HTN
- Cardiovascular disease – CVD
- Continuing Medical Education - CME
- Pan African Society for Cardiology – PASCAR
- Centre for the Development of Best Practices in Health – CDBPS
- International Society for Hypertension - ISH.
- Ministry of Health - MOH

# Background

- The African region ranks highest in hypertension prevalence of 29% compared to global stats of 24% (World Health Statistics 2015).
- cardiovascular disease (CVD) contributes to 30% of deaths globally
- Lack of CVD prevention policies contribute to the bleak picture in Africa and other low income countries.
- Challenges with early diagnosis of hypertension and risk factors as well as poor treatment further complicates

# CTs for Hypertension for Africa

- *'pre-planned studies of the safety, efficacy, or optimum dosage schedule (if appropriate) of one or more diagnostic, therapeutic, or prophylactic drugs, devices, or techniques selected according to predetermined criteria of eligibility and observed for predefined evidence of favourable and unfavourable effects' (NIH 2015).*
- CTs can:
  - Provide robust evidence as to the effectiveness of one intervention compared to others
  - Support knowledge translation process
  - Provide high quality evidence for decision making by policy makers, clinicians and patients

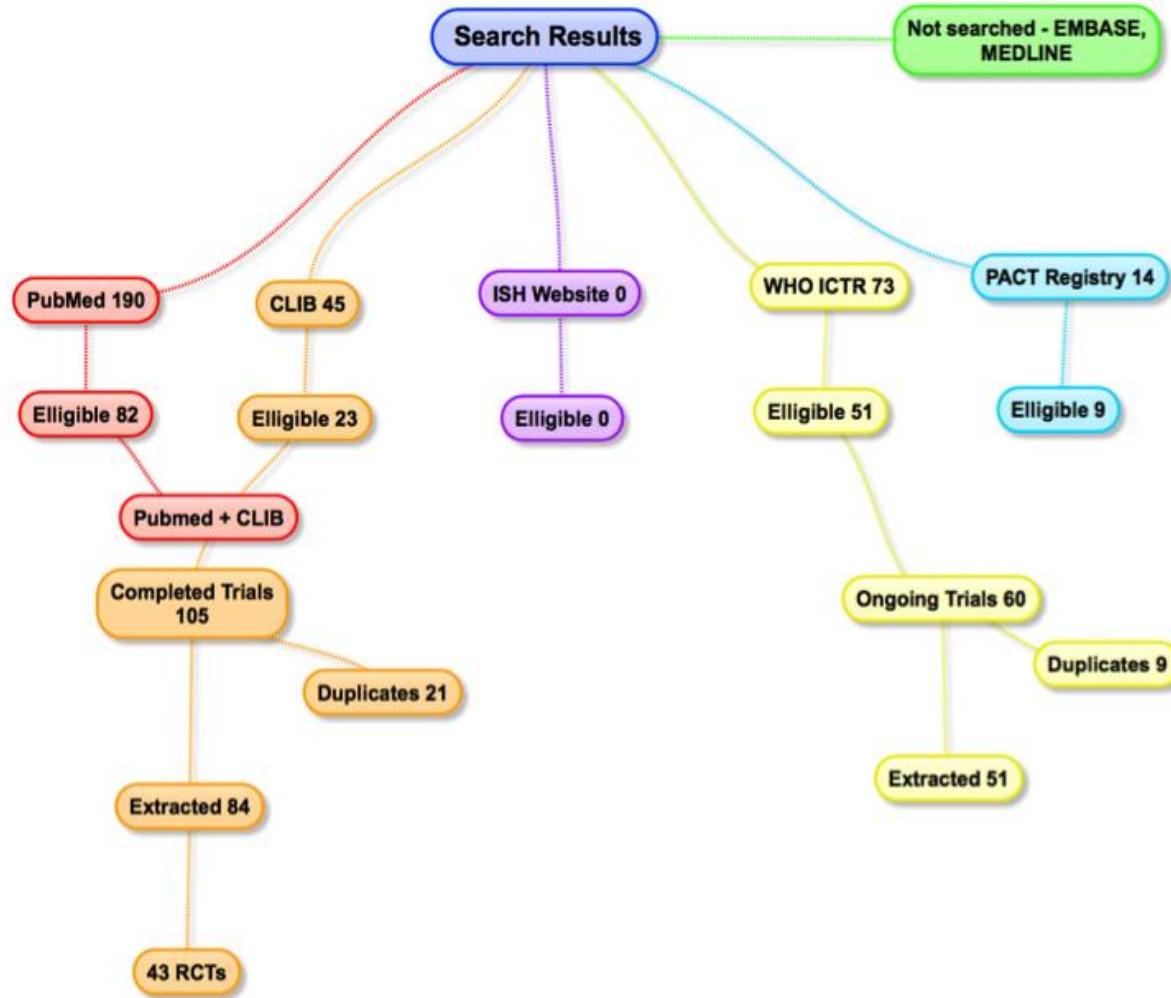
# Objectives

- Map the landscape of clinical trials for hypertension in Africa
  - Identify CTs for hypertension conducted in Africa
  - Identify countries actively involved in Clinical trials
  - Identify journals in which CTs have been published
  - Map out years over which studies span

# Methods

- Systematic search using MeSH terms
- We searched PubMed, Cochrane Library, ISH, WHO ICT, PACTR – *we did not search MEDLINE and EMBASE*
- We searched in English, French, Spanish and Portuguese.
- We only considered clinical trials as per definition above
- We did not assess the quality of these studies

# Search Schematic



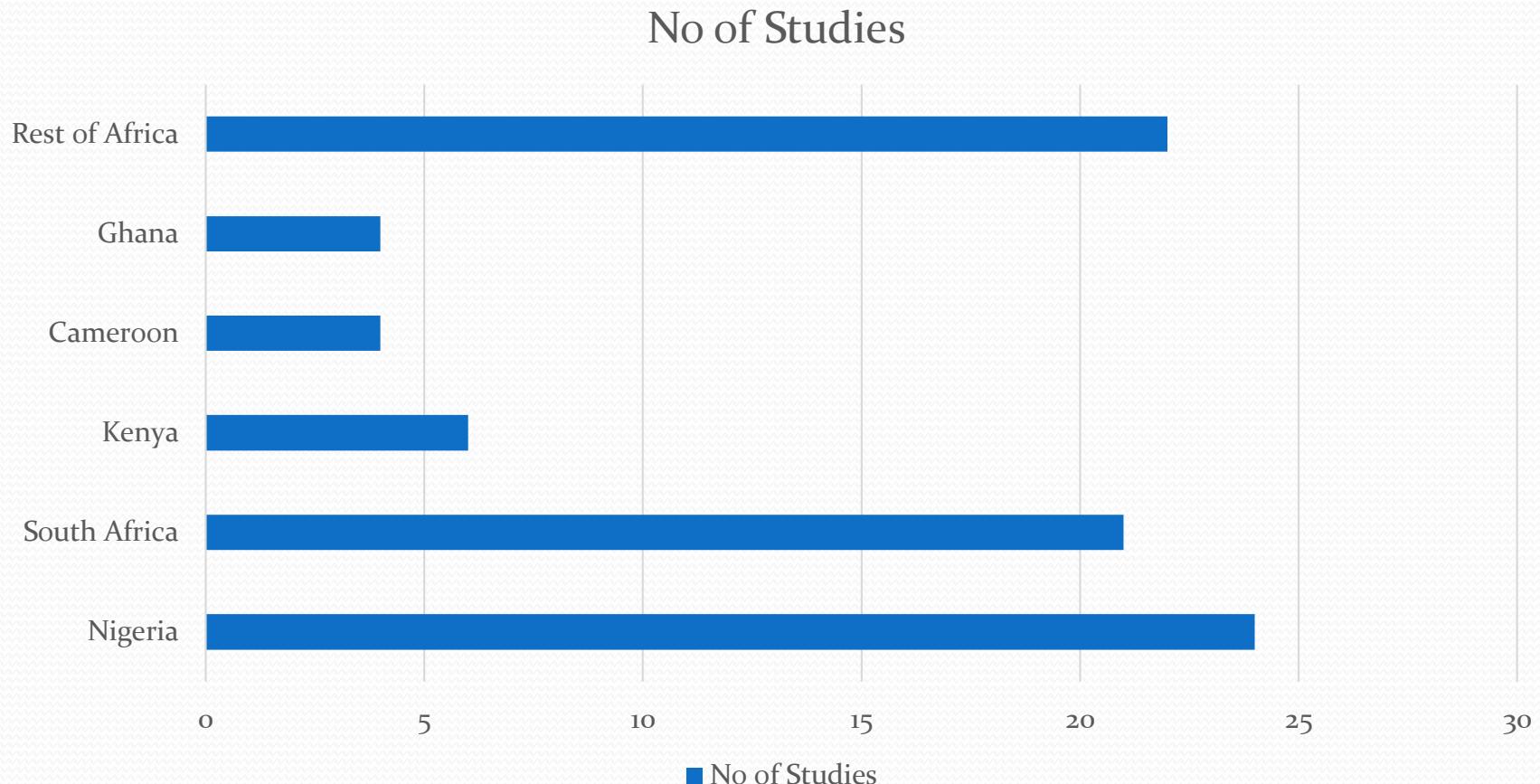
# Results

- A total of 84 studies were identified from 69 authors and carried out in 18 countries
- 43 out of 84 studies were RCTs
- published in 47 journals, with 9 of these journals being African Journals.
- Nigeria and South Africa were the countries where clinical trials were most likely to be carried out, with Nigeria having 24 studies and South Africa having 21 studies.
- Studies ranged from between 1971 to 2015.

# Results

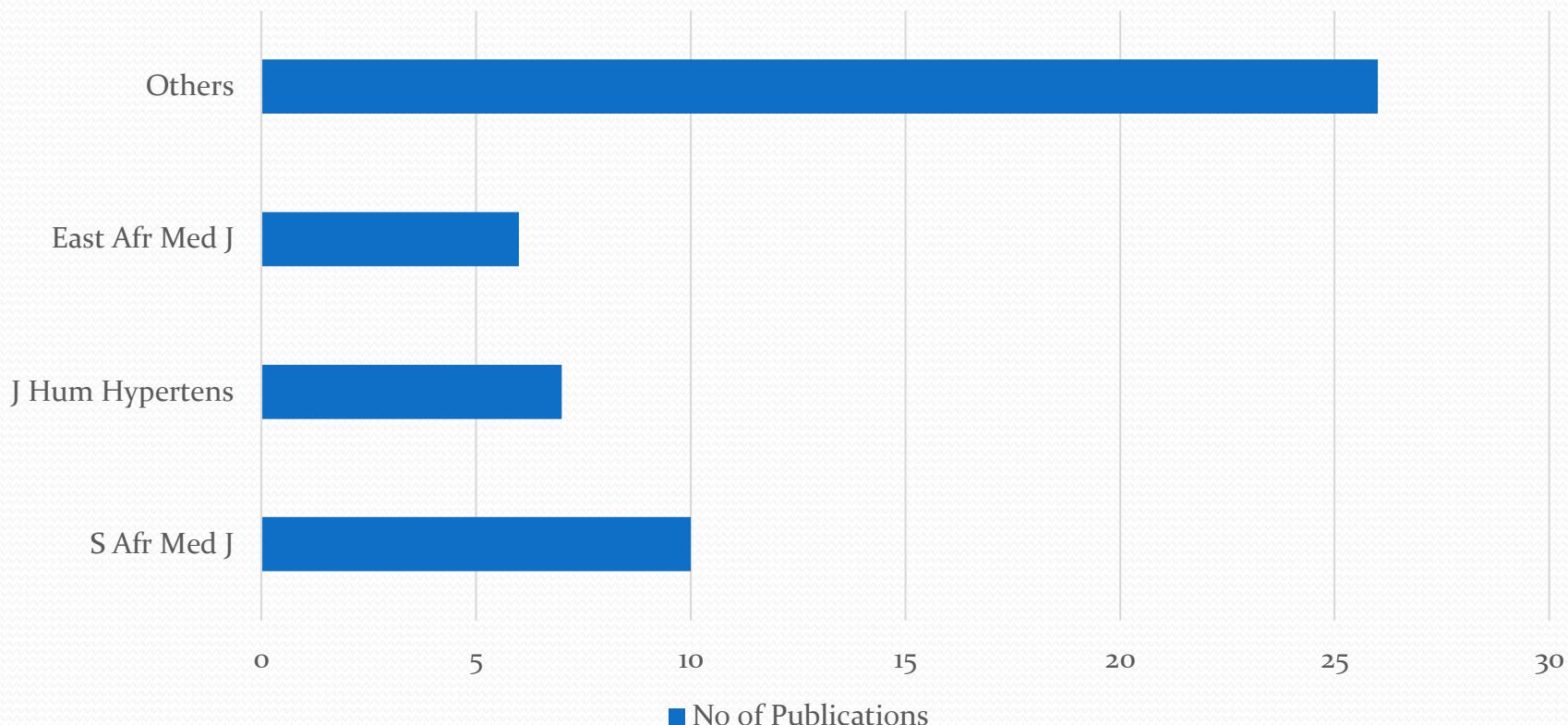
Region	Countries
Sub-Saharan Africa	Cameroon, DRC, Ethiopia, Gambia, Ghana, Cote d'Ivoire, Kenya, Mozambique, Nigeria, Senegal, Tanzania, Zimbabwe
North Africa	Algeria, Morocco, Tunisia, Egypt
South Africa	South Africa

# CT leading country Sites in Africa

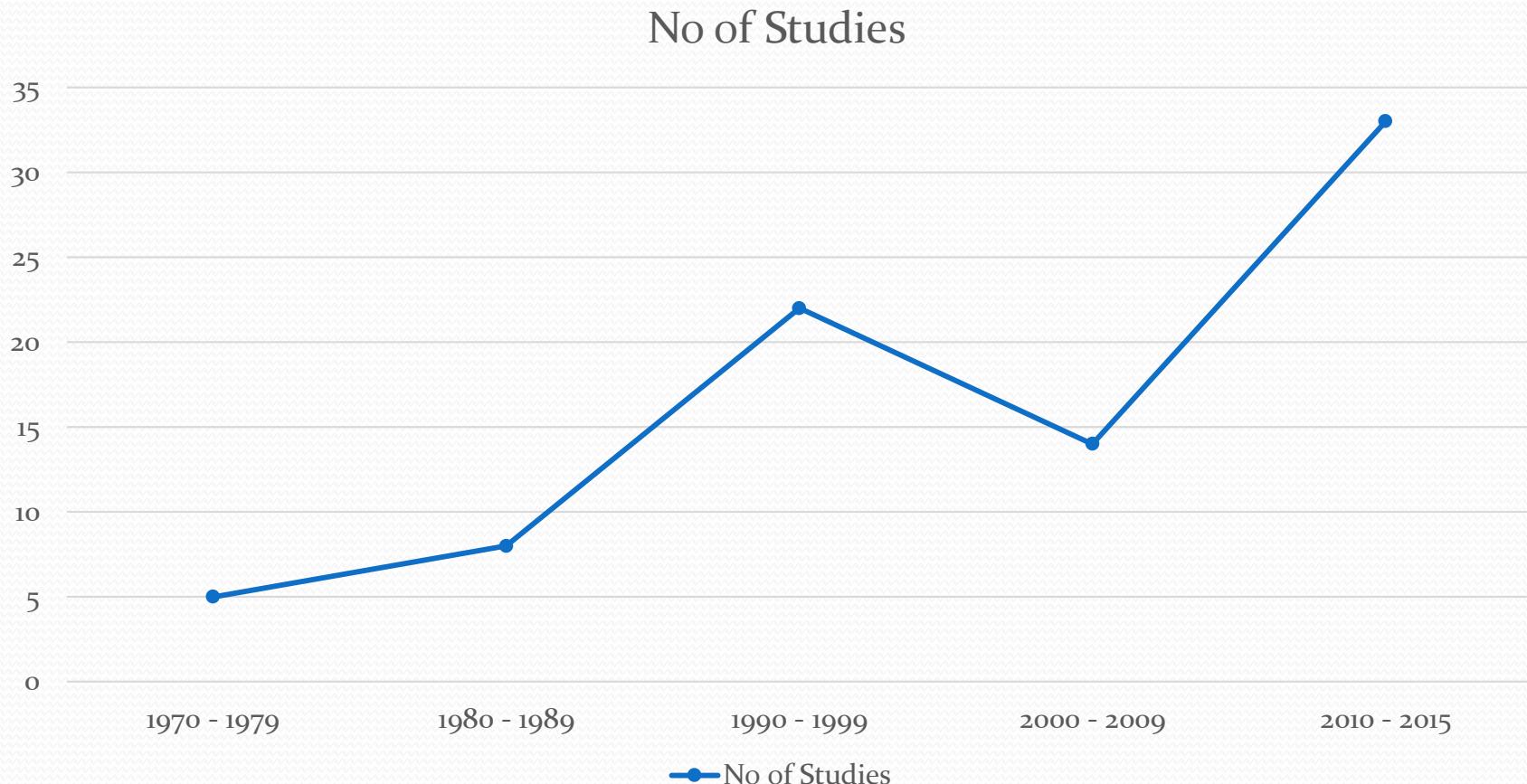


# Leading Journals

No of Publications



# CT Progress 1971 to Present



# Conclusions

- Substantial knowledge on hypertension has been generated from Africa through clinical trials.
- However it is necessary to assess the quality of this study.
- Several CT were not published after registration into a CT registry.
- Following the AllTrials campaign, it is expected that all trials should be reported irrespective of their results.

# Acknowledgement and Declaration of Interests

- Acknowledgements
  - PASCAR
  - CDBPS
  - G-I-N African Community
- Declaration of Interest
  - None