A practical toolkit to meet challenges of multi-centre prostate cancer genetic epidemiological research in Africa

Pedro Fernandez, Hayley Irusen and the Men of African Decent and Carcinoma of the Prostate Consortium (MADCaP)

CONCLUSIONS

● Multi-centre genetic / genomic epidemiological prostate cancer research in Africa driven by African investigators.

Solutions to research challenges

● Toolkit → streamlines co-ordination across disciplines.

● Design → developed after wide-ranging consultation with nurses, clinicians, laboratory technicians, administrative staff, and datacapturers at each African centre.

● Communication → apply low-cost technology (e.g. WhatsApp, Zoom conferencing, custom-developed website https://www.madcapnetwork.org/).

● Education and training → https://www.madcapnetwork.org/.

● Data capture → DatStat, REDcap.

● Medical records → Electronic Content Management (ECM).

"If you want to go fast, go alone, if you want to go far, go together".

INTRODUCTION

● Men of African Descent and Carcinoma of the Prostate (MADCaP) National Institutes of Health (NIH) grant U01-CA184374.

● Key partners:
  1) Dana-Farber Cancer Institute (DFCI), Boston (USA) → Data Coordinating Centre.
  2) The Centre for Proteomic and Genomic Research (CPGR), Cape Town (South Africa) → GWAS.
  3) Centre for Inherited Disease Research (CIDR), Baltimore (USA) → genotyping quality control.
  4) The Division of Cancer Control and Population Sciences (DCCPS) National Cancer Institute (NCI), Bethesda (USA) → stewardship.

● Site-specific resources available:
  Principal Investigator (PI), urologists, epidemiologists, nurses, phlebotomists, laboratory staff, database manager, grants manager/accountant, IRB.

● MADCaP_PM Toolkit allows Project Manager (PM) to centrally co-ordinate activities.

Challenges

● Administrative red-tape (IRB, contractual, DOH).

● Time zones.

● Non-uniform clinical practices.

● Cultural / social differences.

● Data capture, infrastructure differences (missing data, paper vs. electronic folders).

Stellenbosch University Faculty of Medicine and Health Sciences

Pedro Fernandez (PhD)*
Division of Urology
PO Box 241, Cape Town 8000
South Africa
*Affiliated to the African Cancer Institute (ACI)

E-mail: pf3@sun.ac.za
Tel: +27 21 938 9288
Fax: +27 21 938 9278
Web: https://www.sun.ac.za/english/faculty/healthsciences/urology/Pages/Urology.aspx