Children's Mercy Kansas City

SHARE @ Children's Mercy

Posters

4-23-2019

Developing Technologically Advanced Research in Low- and Middle-Income Countries

Isa Abdulkadir

Tina Slusher

Fidelia Bode-Thomas

Sean Riordan
Children's Mercy Hospital

Jean-Baptiste LePichon Children's Mercy Hospital

See next page for additional authors

Let us know how access to this publication benefits you

Follow this and additional works at: https://scholarlyexchange.childrensmercy.org/posters

Part of the Bioethics and Medical Ethics Commons, Genomics Commons, International Public Health Commons, and the Neurology Commons

Recommended Citation

Abdulkadir, Isa; Slusher, Tina; Bode-Thomas, Fidelia; Riordan, Sean; LePichon, Jean-Baptiste; Hassan, Laila; Abdullahi, Shehu; Ofakunrin, Akinyemi; Oguche, Stephen; Shapiro, Steven; and Ogala, William, "Developing Technologically Advanced Research in Low- and Middle-Income Countries" (2019). *Posters*. 81.

https://scholarlyexchange.childrensmercy.org/posters/81

This Poster is brought to you for free and open access by SHARE @ Children's Mercy. It has been accepted for inclusion in Posters by an authorized administrator of SHARE @ Children's Mercy. For more information, please contact histeel@cmh.edu.

Authors Isa Abdulkadir, Tina Slusher, Fidelia Bode-Thomas, Sean Riordan, Jean-Baptiste LePichon, Laila Hassan, Shehu Abdullahi, Akinyemi Ofakunrin, Stephen Oguche, Steven Shapiro, and William Ogala





Developing Technologically Advanced Research in Low- and Middle-Income Countries

Isa Abdulkadir¹, Tina Slusher², Fidelia Bode-Thomas³, Sean Riordan⁴, Jean-Baptiste Le Pichon⁴, Laila Hassan¹, Shehu Abdullahi⁵, Akinyemi Ofakunrin³, Stephen Oguche³, Steven Shapiro⁴, William Ogala¹







Children's Mercy

¹Department of Pediatrics Ahmadu Bello University Zaria, Kaduna Nigeria, ²Department of Pediatrics University of Minnesota, Minneapolis, MN; ³Department of Pediatrics University of Jos Nigeria, ⁴Division of Neurology Children's Mercy Kansas City, MO, ⁵Department of Pediatrics Bayero University Kano, Nigeria

BACKGROUND

While there has been a priority in Low- and Middle-Income Countries (LMICs) on addressing urgent clinical issues, there is a strong interest to develop robust more basic and technologically advanced research programs. Achieving this goal often means partnering with High-Income Countries for support with resources and methods. These partnerships raise the old specter of colonialism and inadequate sharing both in the design and the product of research studies.

OBJECTIVE

We present a collaboration between a group of scientists in Nigeria and the USA in developing a genomic research project and the solutions adopted in tackling the ethical implications and partnership equity and ownership of such a project.

METHODS

A collaborative research project was started between 3 large tertiary pediatric hospitals in North and Central Nigeria (Jos, Kano and Zaria) and a pediatric hospital in the USA (Kansas City, MO) & 2nd University (Minneapolis, MN).

The project was constructed on the basis of three basic principles:

- 1. Equal partnership in development of the project.
- 2. Equal partnership in sharing in the outcome of the project (abstracts, publications, etc.).
- 3. Frequent contacts via physical & virtual meetings.

METHODS

The four steps of the collaboration: Based on a **Plan Do Study Act** (PDSA) study model

- **Plan:** Kaduna, February 2017- Design the study (IRBs, Contracts, MOU...)
- **Do:** Abuja, February 2018 Step by step protocol.
- **Study:** Kano, Zaria and Joss, December 2018 – Preliminary results, evaluate the process
- Act: Ongoing Implement the decisions taken during the Study phase.

First meeting: Planning, Kaduna, February 2017



RESULTS

PHASE 1:

Project Initiation: 1-week retreat in Kaduna, Nigeria.

- Develop the methodology
- MOU: Clear and transparent rules in data sharing and publication credits.

Project Launching: 10-day retreat one vear later in Abuia Nigeria: Review and practice:

- Clinical procedures
- Lab techniques

Study and Assess: Review of preliminary data collection after 6 months.

- Interactive observatory group-based observation & feedback process
- Identification of methodological problems in each center (USA and Nigeria).
- Protocol adjustments

PHASE 2:

- Resume data collection.
- Presentation of initial results at PAS (poster 356).
- Continue PDSA process

Organogram of the collaboration USA Site PI Nigeria Site PI JB Le Pichon Stephen Oguche Advisorv board Jos PI Kano Pl Zaria Pl **USA PI** Lab Pl **Bode Toma** Zubaida Farouk Isa Abdulkadir Sean Riordan Christian Isichei

STUDY AND ASSESS, December 2018

From bedside to bench: Interactive group-based feedback





CONCLUSIONS

We present a model of collaborative research project between LMICs and a High-Income Country that was developed with attention to ethical issues as they pertain to equal participation in development and distribution. We believe that successful collaborative research in LMICs can be developed if a strong emphasis is placed on interactive and egalitarian principles in all aspects of the research project

REFERENCES

Lau et al. International Collaborative Research Partnerships: Blending Science with Management and Diplomacy. J AIDS Clin Res 2015.

Sidle et al. A Needs Assessment to Build International Research Ethics Capacity. J Empir Res

John et al. Successful Global Health Research Partnerships What Makes Them Work?

Lavery & Ijsselmuiden . The Research Fairness Initiative: Filling a Critical a Critical Gap in Global Health Resarch Ethics. . Gates Open Research. 2018.

Dean et al. Promoting sustainable research partnerships: a mixed-method evaluation of a United Kingdom-Africa capacity strengthening award scheme. Health Res Policy Syst. 2015

ACKNOWLEDGEMENTS

We wish to thank the entire Stop Kernicterus in Northern Nigeria represented by: USA: Jean-Bantiste Le Pichon MD, Steven Sharpiro MD, Richard Wennberg, MD; Sean Riordan, PhD, Tina Slusher, MD.

SKINN leadership: Stephen Oguche, BM BCh; Fidelia Bode-Thomas, MBBS; Chris Isichei BMBCh, William N Ogala MBBS

Jos:; Bose O Toma, MBBS; Christopher S Yilgwan MBBS; Zuwaira Hassan MBBS; David Shwe, MBBS; Akinyemi O Ofakunrin MBBS; Halima Abdu, MBBS; Udochukwu M Diala, MBBS; E Olagbaju, OND; Nursing: Victor C Pam, MBBS; Joseph O Abba, MSc.; Samira N Attah, OND, Samuel Mamu, MBBS

Kano: Zubaida L Farouk, MBBS: Binta W Jibir, MBBS, MSc: Idris Y Mohammed MBBS. MSc: Hadiza A Usman MBBS: Muhammed Abdusalam, MBBS: Shehu U Abdullahi, MD: Fatima Usman, MBBS; Aisha Kuliya-Gwarzo, MBBS, MSc; Fatima I Tsiga-Ahmad, MBBS Laila Umar, MBBS, MPH

Zaria: Isa Abdulkadir, MBBS, MPH: Laila Hassan MBBS: Fatimatu Abdullahi MBBS Saratu Purdue MBBS, Hafsatu Maiwada Suleiman, MBBS