



GLOBAL HEALTH RESEARCH for MEDICAL STUDENTS: LESSONS LEARNED



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INTRODUCTION

- Medical students seeking to conduct research in an international setting face a unique set of obstacles
- Developing flexible protocols, obtaining multiple IRB approvals, collecting data in unfamiliar contexts, and navigating international research legislation are some challenges a global-health-oriented medical student must consider when conducting research abroad
- Many academic institutions are not well-versed in the requirements international research, so it often falls on the student to be knowledgeable about the process
- In the dynamic and context-specific environment of global health research, selecting a mentor to help navigate the many unanticipated roadblocks is paramount
- I present my experiences and lessons learned as a medical student who spent three months conducting original qualitative research in Kenya as a principal investigator of a dual-institution study

METHODS

Overview of Research Immersion Requirements

- All Vanderbilt School of Medicine students must dedicate a minimum of three months to conducting a research immersion (RI) project during their third and fourth years
- During their second year, students prepare by identifying a faculty mentor, discussing existing projects they may expand or new projects to begin, and submitting proposals to the Institutional Review Boards (IRB) for approval
- IRB approvals and completion of a month-long planning course is required before beginning
- 5% of the Class of 2025 chose to do their research project in an international setting, and half of these students chose to do a qualitative study
- Students are granted \$2000 from VMS to offset research and travel costs

Timeline

- Nov 2022: Research Area Identified
- Jan 2023: Potential mentors identified and contacted
- March 2023: Mentor confirmed
- May 2023: Tentative schedule for RI months planned
- June 2023: IRB approval(s) obtained
- August 2023: "PLAN" – month-long course to solidify research question and create outline of paper, tables and figures

My Research Focus

- Through a mixed-methods approach of validated mental health screening tools and focus group discussions (FGD), my RI study aimed to qualitatively explore the challenges that Kenyan adolescents with spina bifida and caretakers of children/adolescents with spina bifida face, with a unique emphasis on mental health
- The social, emotional, and mental burden of spina bifida has yet to be studied in Kenya, and this study hoped to garner expanded health services to better support disabled populations

	Challenge	Cause	Impact	Prevention/Solution
M A J O R	Original mentor recused himself one week before my departure for Kenya	-Mentor unfamiliar with global context, felt out of his depth	-Scrambled to find a new mentor within a week	- Inquire about mentor's other commitments
	Six-week wait for IRB reapproval while in Kenya	-Mentor taking on other institutional responsibilities -Personnel and protocol changes -Kenyan IRB meets once a month	- Required to update PI on both IRBs and submit for reapproval -Had two weeks to collect all interviews	- Choose mentor who is comfortable with the project's context - Write IRB protocols as generally as possible - Be familiar with local IRB protocols
	Deviation from protocol, necessitating data expungement	-Many protocol iterations -Participants who met exclusion criteria were inadvertently included	-Required to expunge data and report deviation to both IRBs	- Carefully write inclusion and exclusion criteria - Have a third party read the protocol
	International data laws preventing transfer of data from Kenya to USA	-World events	-Cannot transfer transcripts for content analysis outside of Kenya -Additional scrutiny from Vanderbilt entities (legal, data privacy)	- Find local partners to facilitate content analysis - Be creative with obtaining digital access
M I N O R	Finding enough participants to hold focus groups	-Complicated transportation in Kenya -No prior patient agreements for research	-Required community stakeholders for to help recruit participants	-Get local buy-in -Be open to traveling for recruitment
	Miscommunications with Kenyan IRB	-Perception of outsider interference/judgement	Interpersonal difficulties that complicated future interactions	-Have mentor mediate these conversations -Pay attention to local norms
	Issues with choosing an appropriate consent form	-Miscommunication with VUMC IRB about consent form requirements	-Local IRB requested to change consent form upon arrival, delaying data collection	-Clarify with IRB department head, as consent is usually local team's purview

LESSONS LEARNED

- Choose your mentor carefully!
 - Prior experience with working in global contexts is invaluable
 - Establish realistic expectations on both sides for mentoring commitments
- Write your protocols intentionally. Do not be overly specific
 - Dynamic environments require flexible protocols
- Get local buy-in!
 - Diagonal relationships (social workers, PT/OT, community stakeholders) are crucial
- You are not just a medical student! Do not be afraid to step up and be the PI of your own project

- You are sometimes just a medical student. Let your mentor help navigate difficult conversations for you, so you don't appear to overstep or miscommunicate in new contexts
- Be FLEXIBLE! Have a plan B, C, D, and E! Allot more time than you think you need
 - Consider a buffer month of clinical work
 - "The only thing that is certain in Africa is that the sun will rise and set"
- Be prepared to be contacted by legal teams, software teams, etc. As an international project, you are under greater scrutiny!