

Data Analyst/Statistician Volunteer

Terms of Reference



Data Analyst/Statistician Volunteer

Volunteer Brief and Terms of Reference

Summary

KGHP are looking to recruit a proficient data analyst to assist our Zambian partners with a study investigating microbiology and antimicrobial resistance patterns of surgical site infection across the Copperbelt Province of Zambia in three tertiary level hospitals: Ndola Teaching Hospital, Kitwe Teaching Hospital, and Arthur Davison Children's Hospital. This study is led by the Head of Surgery at Ndola teaching Hospital and will determine and characterise the burden of surgical site infection (SSI) at Ndola Teaching Hospital, and Arthur Davison Children's Hospital.

Data has already been collected over a six-month period with a sample of 390 participants who have postoperative wounds. The successful candidate will provide support remotely, liaising with the Head of Surgery at Ndola Teaching Hospital and will provide advice and support to data analysis and visualisation.

King's Global Health Partnerships

King's Global Health Partnerships (KGHP) works with health facilities, academic institutions, and governments to strengthen health systems and improve the quality of care in four countries: Somaliland, Sierra Leone, the Democratic Republic of Congo and Zambia. We bring together health, academic and international development expertise from King's College London, the UK's National Health Service (NHS) and our international partners to:

- Educate, train and support healthcare workers
- Strengthen healthcare and training institutions
- Enhance national health policies and systems.

Our programmes are delivered by volunteers, with educators, researchers, health professionals, managers and health sector leaders taking up volunteering placements to deliver technical advice, teaching, training, and distance mentoring and on the job support to their counterparts in the global south.

King's Zambia Partnership

The King's Zambia Partnership is a new partnership for KGHP but builds on the successes of a 10-year partnership between Guy's & St. Thomas' NHS Foundation Trust (GSTT), the Ndola Teaching Hospital, and the Arthur Davison Children's Hospital, both situated in the Copperbelt Province in the Northwest of Zambia. We work with our partners to strengthen the health system by supporting the education and training of healthcare workers, and improving clinical services, hospital management, and research.

Context

SSI are the most frequent health care associated infections in Low- and Middle-income countries, and commonly result in significant morbidity and mortality as surgical outcomes and yet more than half are avoidable and can be prevented. In African hospitals, the rates of SSI are estimated at 16% to 37.8% with a prolonged hospital stay while in Europe and USA rates are between 1.5% to 20%.

The burden of SSI affects lives of millions of people each year and contributes to the development of Antimicrobial Resistance among the bacterial isolates from community acquired infection to antimicrobials prescribed at primary and secondary health care levels. Despite preventive measures put in place, 77% of surgical mortalities are reported to be related to SSI, with double health-care cost compared to patients without SSI, and yet majority of microbes implicated are acquired either endogenously or exogenously from the environment of the patient.

This study seeks to understand SSI incidence across the three tertiary level hospitals in the Copperbelt Province in Zambia and to inform future practices surrounding surgical techniques, antibiotic usage, and prescribing practices. The Head of Surgery has led the study and is now seeking academic support to analyse the data collected.

Who do we want?

- **Qualifications:** Postgraduate qualification or strong experience in quantitative methodology.
- **Experience:** Candidates must have proven experience in quantitative data analysis and visualisation which can be evidenced through their current role or from prior experience in academia. An understanding or interest in surgery, clinical research and/or global health will be beneficial, although not essential. It will also be advantageous for candidates to have prior cross-cultural experience and be able to communicate effectively with international partners.
- **Skills:** Candidates must have a good level of mathematical ability, and the ability to analyse and interpret complex data sets. They will have a methodical and logical approach to work, as well display accuracy and attention to detail.
- **Personal Characteristics:** Excellent interpersonal and intercultural skills, highly skilled in the use of verbal and non-verbal communication.

When and where

This is a remote volunteering opportunity, and support will be provided through online discussions, data analysis and review of publications. We envisage that this voluntary engagement will be for a maximum of six months. This position will require approximately a maximum of one hour's engagement per week and can be undertaken flexibly in your own time.

Application

All volunteer roles are appointed following an application and interview process, scheduled for a few days after the application deadline. If you are interested in applying, please complete the online application form and submit a C.V. under the "Apply" tab on our Global Volunteering Scheme web page: www.kcl.ac.uk/kghp/volunteering. The deadline for applications will be displayed on the website.

Thank you for your interest in King's Global Health Partnerships.

KING'S COLLEGE LONDON

Centre for Global Health and Health Partnerships
Suite 2.13 Weston Education Centre,
Cutcombe Road, London SE5 9RJ

T: 020 7848 5060 **W:** kcl.ac.uk/KGHP
E: kghp@kcl.ac.uk  [@KingsGHP](https://twitter.com/KingsGHP)