Improving Trauma Care in Ghana

Community Engagement and Involvement Workshops to Set a Trauma Research Agenda

May 2025

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Authors and acknowledgements

This work was conducted by a multiprofessional team, comprising members from the University of Ghana Medical School, Department of Surgery at Korle Bu Teaching Hospital, and the International Health Systems Group at the University of Cambridge.

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Summary

In May 2025, two separate workshops were conducted to better understand trauma care and healthcare access following injury in Ghana, and to identify potential areas for improvement and future research.

Organised through a collaboration between teams at the University of Ghana and the University of Cambridge, the workshops brought together two key groups in separate sessions: clinicians involved in trauma care and members of the public who had previous experience in receiving trauma care. The aim was to discuss potential areas of concern and identify opportunities for improvement.

The workshops led to the identification of key priority areas for researchers to consider during the development and design of their future collaborative research.

Introduction

Injuries and violence are responsible for an estimated 10% of all years lived with disability worldwide (1). Figures from the WHO show that the majority of the traumatic fatalities occur as a result of Road Traffic Accidents (RTAs), 90% of which occur in low- or middle-income countries (1). Indeed, traumatic injuries cause the greatest loss of disability-adjusted life-years for young adults worldwide (2), in turn leading to huge strains on healthcare services and economic output (3,4).

Ensuring improvements in global mortality rates from trauma was a core part of the Sustainable Development Goals (SDG 3.6) as reported by the United Nations in 2015 (5). However, trauma care is a complex healthcare process, requiring nuanced interactions across multiple entities and stakeholders, functioning often within a pre-existing healthcare system. As such, to improve trauma care, ensuring all aspects of the trauma pathway are analysed and assessed is imperative if overall standards are to be improved.

The impacts of traumatic injuries worldwide are also evident in Ghana. RTAs remain a significant cause of injury in the country, especially motorcycle-related (6), and overall mortality rates have been reported up to 60% in certain subsets of trauma patients (7). Whilst significant improvements have been made to trauma care capacity during the past decade in the country, critical deficiencies remain (8); financial difficulties have been reported as a key limitation for accessing quality trauma care (9) and varying rates of non-adherence to patient follow-up post-injury are present (10).

Through a collaboration between the University of Ghana and the University of Cambridge, two Community Engagement and Involvement (CEI) workshops were conducted in Accra, Ghana, to gain a deeper understanding of current trauma care in the region and identify opportunities for improvement. This report outlines the delivery and findings from these workshops.

Aims and objectives

We conducted two separate workshops for clinicians involved in trauma care and members of the public respectively, to understand current trauma care and healthcare access following injury in Ghana, and identify potential areas of improvement and future research.

The specific objectives for the workshops were:

- To explore current perceptions of trauma care in Ghana, for both clinicians and members of the public.
- To identify any potential areas of improvement and future research within trauma care in Ghana.
- To ascertain how the overall trauma system functioning could be improved in Ghana.

Workshop 1: Clinicians Involved in Trauma Care

The first workshop was conducted at Korle Bu Teaching Hospital in Accra, attended by 18 clinicians and academics involved in trauma care. The facilitators were from the University of Ghana Medical School and the International Health Systems Group at the University of Cambridge.

The sub-specialities of the attendees encompassed a wide range of surgical specialities involved in trauma care, including Emergency Medicine, General Surgery, Orthopaedics, Paediatric Surgery, Urology, Plastic Surgery, and Neurosurgery. At the beginning of the session, a brief presentation was delivered to provide context for the planned discussion.

Overall, there was agreement that trauma care was an important area of research and that more should be done to improve trauma care outcomes in the country. However, many attendees were unsure how to begin. Whilst many of the specific suggestions outlined from this workshop related to the hospital setting, there was also a consensus that pre-hospital care and rehabilitation standards needed attention.

Identification of Deteriorating Patients

The issue of delays in identifying deteriorating patients on the surgical ward, particularly in the post-operative setting, was identified as a recurring concern by multiple attendees.

A lack of sufficient clinical monitoring means that deteriorating patients are not identified quickly enough. In particular, once the patient has been discharged from the recovery area or intensive care setting, the frequency of observations significantly decreases, which in turn directly impacts patient care.

However, patient family members, who are often by the bedside whilst their relative is on the ward, can speak directly to the nursing staff if they become concerned, and the nursing staff will check on the patient and escalate as needed. That being said, low nurse to patient ratios also negatively impact patient care and the ability to quickly identify and act on deteriorating patients.

Delays in Access to Care

Concerns were also raised regarding delays in care experienced when obtaining the necessary imaging or medications from the relevant premises around the hospital, as only a select few services and provisions are provided directly by the hospital. In trauma care, the need for rapid and effective care is acknowledged; however, it is limited by a lack of resources.

There was an acceptance that, unfortunately, many patients do not make it to a hospital following traumatic injuries. However, in cases where unwell patients arrive but do not have the financial means to pay for care, the hospital and staff will always find ways to ensure that this does not limit their immediate care (and can absorb costs if needed).

Transfers to and from Other Hospitals

There are often significant delays in transferring patients from other hospitals, which can substantially impact overall patient outcomes. By the time the patient is transferred and arrives at the treating centre, the patient's clinical state has often changed, which may mean that definitive treatment cannot be undertaken.

Need for Vascular Surgery

There was an awareness of the current lack of vascular surgery services available in the region, stemming from both a shortage of trained surgeons and limited resource availability. At present, vascular surgery is not available in the majority of district and regional hospitals. Most patients with traumatic vascular injuries therefore have their operations performed either by a non-specialist (e.g. Plastics or General Surgery), with only a small proportion appropriate for transfer to the hospital with vascular surgery present.

Vascular surgery involved many of the specialities present at the workshop, and it was agreed that further work was needed to develop this service.

Figure 1: Clinicians' workshop, Korle Bu Teaching Hospital, Accra, Ghana

Workshop 2: Members of the Public

The second workshop was held at a cafe in Accra, Ghana, and attended by members of the local community, as well as facilitators from both the University of Ghana Medical School and the International Health Systems Group at the University of Cambridge. The aim of the workshop was to discuss areas of trauma care that attendees identified as causing issues, and to explore potential solutions.

There were ten attendees present, all of whom had been involved in an accident, experienced a traumatic injury, or had a relative or friend who had. At the beginning of the session, a brief presentation was delivered to provide context for the planned discussion.

Several themes emerged from the discussion, with attendees discussing areas of concern from across the patient pathway. At the end of the session, many attendees reported that they had found the discussion to be useful and had learned something new.

Fear of Involvement

"There's no such thing as a hero in trauma care"

There was a real fear of intervening as a bystander when a traumatic injury or accident occurred due to the police involvement, community judgment, or subsequent financial implications at the hospital that could occur.

Whilst many reported that the community response to injury is similar regardless of the patient involved, the initial scenes following an accident are often chaotic. Whilst police can be present initially, they can also cause subsequent issues for those intervening to help the affected individual. Therefore, people often avoid getting involved in providing assistance.

If you are the driver involved in an accident, there is further fear that you will be judged and punished by the community if you begin to intervene further. Many felt that after initially intervening, things can rapidly change, and you will be seen as a culprit soon after. This further limits individuals' willingness to provide local assistance in trauma cases.

When you arrive at the hospital, if you have acted as a Good Samaritan, you may be asked to provide financial support or offer bedside care until the patient's family members arrive. This is a burden that many wish to avoid.

It was agreed that the use of a formalised medical alert phone app would be beneficial, as this would enable bystanders to provide Good Samaritan care without fear of repercussions from the police. There was a desire for formalised methods to improve local trauma community response and enthusiasm for potential interventions that could be implemented.

Delays in Seeking Care

"The difference between life and death is time"

General medical issues, such as a headache or fever, are typically waited out before seeking healthcare, especially if they are not severe or considered life-threatening. The decision to seek medical care is normally a balance between cultural, religious, and financial factors. However, for traumatic injuries, the majority of people are aware that these can become serious; therefore, they are more likely to seek medical care, especially if there is blood or a visible injury present.

Most patients seek medical care first following injury and only turn to traditional medicine or herbalists if no medical facility is nearby. However, patients may seek advice from traditional medicine or herbalists after they have received trauma care at the medical hospital. There are often cultural or family pressures involved in such decisions. A proportion of patients do not attend follow-up appointments at the hospital after discharge, with some seeking additional care through traditional medicine.

Following an injury, an ambulance is rarely called due to issues surrounding delays in their arrival and potential cost implications. For example, the first question that may be asked when calling for an ambulance is "who is going to pay for the fuel?". As such, around two-thirds of the population do not know the phone number for the emergency service. Instead, bystanders would flag down a taxi (typically Bolt taxis) due to the benefit of speed, or a Good Samaritan would take them to a hospital in their own vehicle. Hired taxis may not take the patient to a hospital if they are bleeding, due to issues with soiling their car.

Potential ways to improve ambulance response were discussed, including the use of cameras to identify sites of injury and speed up response times.

Lack of Support Following Injury

"The rich do not pray before travelling each day as, if they are injured, they do not need to worry; I pray every day before travelling, as I know the impact injury may have on me."

There was a genuine fear of getting injured due to concerns about the implications that injuries can have, both financially and functionally. There is no state support available for those unable to work following an injury. However, if you have an employer, they may provide short-term financial aid, but this will typically run out quickly. Family support will try to care for the injured individual if possible.

Figure 2: Workshop with members of the public, Accra, Ghana

Recommendations for Future Work

This programme of collaboration between teams at the University of Ghana and the University of Cambridge identified multiple context-specific issues for trauma care across Ghana.

Key recommendations have subsequently been devised from this work that highlight future areas of engagement and research:

Formalising Injury Alerts in the Community

Develop methods and techniques to improve trauma alerts in the community and provide formal recognition of any support provided by bystanders.

System Approach to Improving Trauma Care

Map current trauma care pathways within Ghana to enable improvements across the healthcare system to be made, managed, and implemented appropriately.

Development of Vascular Service

Help to support and develop the vascular surgery service in the region, and ensure it is integrated within the current trauma care provisions.

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