Although this trend is not surprising given the increasing life expectancy in the region during the past few decades [Figure 2], this demographic change is likely to present significant challenges to the delivery of A and E care in sub-Saharan Africa without adequate preparation.

Aging is a global concern, with more than 500 million adults aged 65 and older worldwide, and this older adult population grows by approximately 870,000 each month. With continued shifts within the global population structure, healthcare systems around the world are already seeing increasing numbers of older patients and must be prepared to face a host of high-intensity health issues prevalent in the elderly population including coexisting cognitive disorders, multiple comorbidities, and polypharmacy. When considering the emergency care of acutely ill or injured elderly patients with the added complexity of preexisting, sometimes poorly controlled chronic diseases, a significant expenditure of resources will be required to provide adequate medical care in a sustainable manner.

Regions such as sub-Saharan Africa, which are already operating at the limits of their resources, will need to develop and embrace healthcare innovation and multidisciplinary team approaches as part of the general strategy to better serve the fast-growing geriatric population segment. Facing acute workforce shortages, both primary care providers and specialists may need to flex beyond their primary areas of expertise to provide comprehensive care to those in need.

To accomplish these goals, significant educational efforts will be required to ensure proper patient and provider awareness of key issues at hand including topics such as preventive health, medication safety, and drug–drug interactions. Identifying patterns of healthcare utilization specific to the geriatric population could be key in developing such targeted preventive and primary care coordination. Health systems in sub-Saharan Africa will need to effectively manage increasing proportion of patients with chronic diseases (diabetes, congestive heart failure, mental health issues, chronic kidney, and pulmonary diseases). Consequently, underdeveloped specialty areas such as critical care, medical/surgical subspecialties, geriatric care, and palliative services will inevitably come into focus. Additional resources may be needed to partially alleviate healthcare provider shortages. At the same time, creative, nontraditional solutions, such as telemedicine and other similar initiatives, may be critical in this domain. Adequate and timely access to health care is
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important in reducing excess A and E utilization and improving health outcomes.[49,50]

Trauma care in sub-Saharan Africa will continue to evolve. Regionalization of trauma systems will likely be necessary to provide injured patients with optimal care, especially for those presenting with severe injuries in the setting of preexisting medical conditions.[51] This process will require the development of sustainable, cost-effective multidisciplinary approaches that incorporate high-quality geriatric and critical care capabilities, as well as reliable access to emergency medical and surgical services.[52,53] Emergency and trauma providers accustomed to treating younger patients will need to make an important transition in both acute awareness and knowledge application regarding both general and specialty geriatric care including specifically targeted postgraduate, graduate, and medical education efforts.[54-56]

Finally, Ogunmola and Olamoyegun suggest that the elderly may be disproportionately affected by medical emergencies (e.g., the ≥60-year-old segment constitutes approximately 5% of total sub-Saharan population, yet the authors report a 27% representation of elderly in their manuscript).[1,57] In comparison, persons aged 65 or older in the United States represented 11% of the total population in 2009–2010, however, comprised only 15% of emergency room visits.[58] Given this observation, we must emphasize the importance of well-functioning and adequately funded public health surveillance services that are capable of monitoring demographic changes, critical health outcomes (including mortality rates), incidence and prevalence of diseases, injury statistics, health care-related complications, resource utilization, and life expectancy within a community. The global elderly population is growing, with continued increases in this demographic segment across the developing world.[59,60] Leaders of sub-Saharan Africa, in conjunction with the international community, must prepare to face the challenges associated with this demographic megatrend.

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Thomas R. Wojda, Kristine Cornejo¹, Pamela L. Valenza¹, Gregory Carolan², Richard P. Sharpe, Alaa-Eldin A. Mira³, Sagar C. Galwankar⁴, Stanislaw Peter Stawicki

Departments of Surgery, ¹Family Medicine-Warren, ²Orthopedics and ³Geriatrics, St. Luke’s University Health Network, Bethlehem, PA, ⁴Department of Emergency Medicine, University of Florida, Jacksonville, Florida, USA
E-mail: stanislaw.stawicki@sluhn.org

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Dear Editor,

In 1948, G.Q. Chance observed a pattern of spinal injuries associated with flexion in which the fracture line traveled from the transverse process to the anterior vertebral body. [1] Chance injuries are typically associated with seatbelt trauma as the belt creates a fulcrum around which the thoracolumbar spine rotates. [2,3] Seatbelts are implicated in 71–95% of these fractures. [4]

There is a strong correlation between thoracolumbar Chance injuries and abdominal injuries. One recent study found that one-third of patients with a Chance fracture had associated intra-abdominal injuries, most commonly hollow viscus injury. [4]

A high index of suspicion is essential to establish the diagnosis and prevent subsequent neurologic injury.

A 35-year-old female involved in a high-speed motor vehicle collision was transferred to our Level-1 trauma center. Systolic pressures were 60–70 mmHg on arrival to the trauma bay. Her secondary survey was significant for a seatbelt sign, evisceration of the small bowel, diffuse abdominal tenderness, and posterior thoracic spinal tenderness.

Following the primary and secondary survey, she was emergently taken to the operating room. She underwent exploratory laparotomy with partial small and large bowel resection. On hospital day 2, thoracolumbar spine computed tomography (CT) was performed. No spinal injury or instability was suspected based on the initial review of the CT.

After transfer to a rehabilitation facility, the patient complained of persistent back pain prompting a repeat spinal CT. The CT scan demonstrated spinal pathology not previously recognized. Radiologic findings consisted of focal kyphosis and anterior translation at the T12-L1 level consistent with a flexion-distraction spinal injury. Plain radiographs of the thoracolumbar spine were obtained in the upright position. The alignment at T12-L1 did not change on flexion-extension views, indicative of a fixed deformity.

Although the patient remained neurologically intact, she continued to complain of severe axial back pain and elected to undergo surgery for the condition. The operative procedure consisted of posterior spinal osteotomy and posterior instrumented fusion from T10 to L3.

This case of a missed thoracolumbar flexion-distraction injury represents an important example of the need for a high index of suspicion in the appropriate setting as well as the need for thorough reevaluation of the polytrauma patient during the hospital course.

In many cases, the initial angular displacement will spontaneously reduce, making the radiologic diagnosis difficult at the time of initial evaluation. In retrospect, there was subtle evidence of a...