

Medical evaluation abnormalities in acute psychotic patients seen at the emergency department of Muhimbili national hospital in Dar es Salaam, Tanzania

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Introduction: Prior studies have shown varied rates of medical pathology in patients presenting to acute care settings with psychotic symptoms, and there is almost no literature from the sub-Saharan Africa region. We investigated the yield of physical examination and laboratory testing among patients presenting with acute psychosis to an urban ED in Dar es Salaam.

Methods: This was a prospective observational study of patients presenting to the ED at Muhimbili National Hospital with acute psychosis. A standardized data form was used to prospectively collect demographics, history, physical examination, and diagnostic test results. Data were entered into Excel (Microsoft Corporation, Redmond, WA, USA) and analysed with SAS (SAS Institute Inc., Cary, NC, USA).

Results: We enrolled 252 participants from August to October 2012, mean age 32 (± 11) years, and 69% male. Overall, 161 (64%) had a history of psychiatric illness and 137 (54%) were on psychiatric medication. Comorbidities included dementia (6), HIV (5), recent trauma (5), diabetes (2), CVA (1), and other chronic medical conditions (21). The most common physical examination findings were skin abnormalities (11% of patients), including infections, bruises, cuts, lacerations and rashes. Of patients undergoing laboratory investigations, 39/206 (19%) had abnormal lab findings and 27/39 (69%) were clinically significant, including positive HIV tests (9), abnormal blood chemistries (7), positive malaria tests (5), abnormal full blood picture (4), and abnormal blood glucose levels (3).

Conclusions: In our cohort, history and physical examination findings were not sufficient to rule out serious medical conditions among patients presenting with acute psychosis. The observed rate of laboratory abnormalities was higher than previously published rates from high-resource settings. Based on our findings, patients presenting with psychosis to an acute care facility in this region should be evaluated with physical examination and laboratory studies to rule out serious underlying medical pathology.

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Descriptive analysis and lessons learned from the disaster medical response to an urban building collapse

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Introduction: An effective disaster medical response plan is imperative for any established emergency medicine program. Here we describe the response to an urban building collapse in Dar es Salaam, Tanzania, including a description of the event, type and severity of casualties, and lessons learned.

Methods: We interviewed members of the medical response team and reviewed the treatment records and the results of the investigation.

Results: Several local hospitals sent personnel to assist at the site. The Muhimbili National Hospital Emergency Department (ED) sent staff to establish triage and provide stabilizing medical care, while another team remained in the ED and prepared to treat survivors. Of fifty nine casualties, 37 were dead at the scene. The most common injuries among the survivors were musculoskeletal and soft tissue trauma, including fractures, lacerations, and degloving injuries. All were stabilized on-site prior to transport to the hospital. The search and rescue efforts were hampered by a lack of resources. Heavy machinery, sufficient to clear the rubble and facilitate rescue efforts, was not immediately available. Private engineering companies later provided this equipment. Protective gear, such as hard hats, gloves, and boots were not available, thus some responders were injured while clearing the rubble and three were bitten by police dogs. Family members gathered at the scene to await news of survivors and some developed respiratory distress due to the dusty environment while others syncope. The investigation revealed that the building was licensed for 10 floors, but construction continued illegally to 16 floors. Structural factors contributing to the collapse included poorly mixed concrete and sub-standard steel bars.

Conclusions: This event highlights the importance of a well-developed disaster response plan, including coordination of medical and rescue workers. Additional policy and advocacy issues identified include the need for building safety code enforcement and available rescue supplies, equipment, and machinery.

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