Abstract

Background: Accuracy of initial assessment of acute abdominal pain (AAP) is confounded by subjectivity and multiple etiologies for similar presentation. Standardized forms may harmonize the initial assessment, improve accuracy of diagnosis and enhance outcomes.

Objectives: To determine the extent to which use of a structured data collection form (SDCF) affected the diagnostic accuracy of AAP.

Methodology: A before and after study carried out from October 2011 to March 2012 of patients aged 13 years and older presenting with AAP in the emergency department (ED) of Aga Khan University Hospital, Nairobi (AKUH,N). Patients clerked by ED physicians using conventional history taking and examination between October and December 2011 were compared to a second group clerked after the introduction and use of a SDCF (January – March 2012) for proportion of correct diagnosis at initial encounter. This influence of age, gender and disease type on the impact of the form was evaluated as was the impact of the introduction of the structured forms on time to ED disposition, hospital stay, number and cost of investigations. Data were compiled in MS-Excel spreadsheets and analyzed using SPSS v16. P value of <0.05 was significant

Results: 125 participants were included, 60 in Period 1 and 65 in Period 2. The overall mean age for males was 28 and 34 for females. Patients with surgical abdominal conditions were 21% and 49% for medical conditions. The diagnostic accuracy was 58% and 43% before and after the introduction of the SDCF respectively (p=0.088). For surgical patients, diagnostic accuracy was 77% before and 31% after the introduction of the form (p=0.018).

Conclusions: The structured form did not improve the accuracy of diagnosing the causes of acute abdomen. It had a negative impact on the surgical diagnoses.