Portable Endoscopy in Rural Population - Using Mobile Technology to Create Global Point of Service Endoscopy

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Background: Upper GI Endoscopy or Gastroscopy is also known as oesophagogastroduodenoscopy (OGDS) has become a necessary diagnostic tool in general surgery. The recent advances in digital and mobile device technology in healthcare in a growing population essential to meet the global surgery goal. We had initiated the mobile endoscopy system "Karl Storz" in year 2016 in Hospital Jerantut followed by Hospital Jengka and Hospital Bentong in year 2019 (Pahang Tengah Clusters).

Results: A total of 253 patient underwent endoscopic procedure from year 2018 till December 2021 in 3 cluster hospitals. In year 2020, Hospital Bentong was choosen to be a part of global surgery 2020. The picture quality of this mobile endoscopy set was good in diagnosing of gastrointestinal diseases and obtaining CLO test for H.pyloric. The disadvantages of this mobile scope is it can't perform as therapetic procedures such as in upper gastrointestinal bleeding.

Conclusion:

Our efforts have resulted in cost-effective management and robust data collection of several common gastrointestinal diseases in remote rural areas of the Pahang tengah cluster. Beside this, mobile flexible endoscopy also will improve the effectiveness of diagnostic testing of gastrointestine diseases. It will offers a reliable option to support endoscopy departments in delivering top quality services, helping them to address not only the concerns of today but also to prepare for the challenges of tomorrow.

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