

Health Information Technology in Developing Countries: A Structured Literature Review with Reference to the Case of Libya

Authors : Haythem A. Nakkas, Philip J. Scott, Jim S. Briggs

Abstract : This paper reports a structured literature review of the application of Health Information Technology in developing countries, defined as the World Bank categories Low-income countries, Lower-middle-income, and Upper-middle-income countries. The aim was to identify and classify the various applications of health information technology to assess its current state in developing countries and explore potential areas of research. We offer specific analysis and application of HIT in Libya as one of the developing countries. Method: A structured literature review was conducted using the following online databases: IEEE, Science Direct, PubMed, and Google Scholar. Publication dates were set for 2000-2013. For the PubMed search, publications in English, French, and Arabic were specified. Using a content analysis approach, 159 papers were analyzed and a total number of 26 factors were identified that affect the adoption of health information technology. Results: Of the 2681 retrieved articles, 159 met the inclusion criteria which were carefully analyzed and classified. Conclusion: The implementation of health information technology across developing countries is varied. Whilst it was initially expected financial constraints would have severely limited health information technology implementation, some developing countries like India have nevertheless dominated the literature and taken the lead in conducting scientific research. Comparing the number of studies to the number of countries in each category, we found that Low-income countries and Lower-middle-income had more studies carried out than Upper-middle-income countries. However, whilst IT has been used in various sectors of the economy, the healthcare sector in developing countries is still failing to benefit fully from the potential advantages that IT can offer.

Keywords : developing countries, developed countries, factors, failure, health information technology, implementation, libya, success

Conference Title : ICHI 2015 : International Conference on Health Informatics

Conference Location : Istanbul, Türkiye

Conference Dates : January 26-27, 2015