## Use of Information and Communication Technologies in Enhancing Health Care Delivery for Human Immunodeficiency Virus Patients in Bamenda Health District

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Abstract: Background: According to World Health Organization (WHO), the role of Information and Communication Technologies (ICT) in health sectors of developing nations has been demonstrated to have had a great improvement of fifty percent reduction in mortality and or twenty-five-fifty percent increase in productivity. The objective of this study was to assess the use of information and communication technologies in enhancing health care delivery for Human Immunodeficiency Virus (HIV) patients in Bamenda Health District. Methods: This was a descriptive-analytical cross-sectional study in which 388 participants were consecutively selected amongst health personnel and HIV patients from public and private health institutions involved in Human Immunodeficiency Virus management. Data on socio-demographic variables, the use of information and communication technologies tools, and associated challenges were collected using structured questionnaires. Descriptive statistics with a ninety-five percent confidence interval were used to summarize findings, while Cramer's V test, logistic regression, and Chi-square test were used to measure the association between variables, Epi info version 7.2, MS Excel, and SPSS version 25.0 were utilized for data entry and statistical analysis respectively. Results: Of the participants, one-quarter were health personnel, and three-quarters were HIV patients. For both groups of participants, there was a significant relationship between the use of ICT and demographic information such as level of education, marital status, and age (p<0.05). For the impediments to using ICT tools, a greater proportion identified the high cost of airtime or internet bundles, followed by an average proportion that indicated inadequate training on ICT tools; for health personnel, the majority said inadequate training on ICT tools/applications and half said unavailability of electricity. Conclusion: Not up to half of the HIV patients effectively make use of ICT tools/applications to receive health care. Of health personnel, three quarters use ICTs, and only one quarter effectively use mobile phones and one-third of computers, respectively, to render care to HIV patients.

**Keywords**: ICT tools, HIV patients, health personnel, health care delivery

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