

Effects of eLearning on Knowledge Transfer, Knowledge Retention, and Quality of Healthcare Provision in Tanzania

Godfrey Kabadi, Anna-Grace Katembo, Frida Ngalesoni, Lupyana Kahemela

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Background

There is a worldwide scarcity in the supply of health professionals, with sub-Saharan Africa contributing only about 3% of the supply for health workers globally. Nurses and midwives in African countries are the two health professionals with the highest shortage. Training nurses and midwives through eLearning approaches could provide an alternative route to reducing their scarcity. The eLearning program is linked with increased knowledge transfer, knowledge retention, upgrading skills and competencies among nurses and midwives. Despite such benefits, there still exists inadequate information on the extent to which eLearning programs have influenced these parameters since their introduction in Tanzania. This study aimed to determine the extent to which eLearning programs increase knowledge transfer and retention and the quality of providing healthcare services in Tanzania.

Methods

The study used mixed design approaches. Data were collected through a structured questionnaire that included demographic information and Likert scale items that were self-administered. The sample size was (n=106) nurses and midwives and (n=18) health facility in-charges. Descriptive results were generated, and multivariable logistic regressions were computed with odds ratios used as a measure of effects, 95% confidence interval (CI), and 5% significance level, through using SPSS and STATA statistical tools.

Results

The majority of midwives and nurses were female (60.4%, n=64), and 72.2%, n=13) of health facility in-charges were female. Nearly half of study participants (48.1%, n=51) worked in hospitals. There was strong consensus on knowledge transfer (degree of consensus, sCn>70%) except on entertainment (sCn=65.8). Knowledge retention was highly scored (sCn=70% to 99%) except in diagnostic (sCn=28%). There was a high rate of skills and competencies (sCn=82.6% to 88.8%). The facility in-charges overall degree of consensus was (sCn=61.5%), indicating a moderate level of satisfaction on the quality of healthcare provision due to eLearning-trained nurses and midwives. Adjusted binary logistic regression findings show that eLearning helps increase knowledge transfer and retention and quality healthcare provision in Tanzania.

Conclusion

eLearning programs show successful tools for knowledge transfer, retention, and improving the quality healthcare provision in nurses and midwives. Therefore, there is a need for increased use of the eLearning programs for training nurses, midwives, and other health care workers to increase the number of clinical staff and eventually increase the quality of provision of healthcare in facilities.

