

Implementation and Evaluation of a Teleneurology Clinic Serving Vulnerable Populations in Zambia During the COVID-19 Pandemic

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Background

Telemedicine increased during the COVID19 pandemic as a safe and feasible alternative to in-person care but was limited to high-income settings. Zambia has only eight neurologists and one crowded outpatient neurology clinic. The suspension of this clinic during the peak of COVID19 resulted in the urgent need for an alternative, and so a telemedicine solution was implemented. Our aim was to evaluate patient and physician acceptance of and satisfaction with teleneurology visits for adults usually attending in-person visits at the University Teaching Hospital (UTH) Neurology Clinic in Lusaka, Zambia.

Methods

Patients scheduled for neurology outpatient appointments in June and July 2020 and those with missed appointments between March and May 2020 were called to ask if agreeable to a televisit. Neurologists conducted teleneurology visits over the phone, WhatsApp video, or Zoom calls, based on patient accessibility, and they documented visit outcomes. Data on patient and provider satisfaction were collected through telephone and online surveys, respectively.

Results

Of 300 patients, 186 (62%) were reachable, and 74% (133) of those alive agreed to a televisit. Stroke (30%), seizures (20%), and headache (16%) were the commonest diagnoses. Most televisits (80%) were by telephone call, 14% by WhatsApp video and 6% by Zoom. Sixty patients and seven neurologists completed satisfaction surveys. Neurologists reported greater confidence in their assessment with Zoom calls. Televisit outcomes showed 30% of patients were stable and discharged to their local clinic, 32% only required medication refills, and 19% required an in-person visit. Patients who preferred televisits noted they were less expensive and less time-consuming, while those preferring in-person visits cited desire for a physical examination. Overall, 98% of patients and 100% of physicians were satisfied with televisits.

Conclusion

Teleneurology visits were an acceptable means of service provision for adults attending the UTH neurology clinic. They are a promising supplement to in-person visits in resource-limited settings, even when video-call support is absent.