

Feasibility of internet-based teleconsultation in patients with multiple sclerosis: a pilot study

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Background

Telemedicine is currently flourishing in rural and emergency settings but its routine implementation in chronic neurological disorders develops more hesitatingly. Individuals with multiple sclerosis (MS) may nonetheless be good candidates because (a) standard care often involves frequent visits to the neurology office, (b) diagnosis is typically established during young adulthood where busy social and professional schedules risk to limit time availability, (c) accompanying physical disability may create logistic boundaries even in areas highly-saturated with neurologists, and (d) they appear to be particularly interested in online interaction with peers and health-care providers. The purpose of this study was to demonstrate the feasibility of planned audiovisual teleconsultation over the internet in patients with MS.

Methods

Twenty subjects with MS presenting at the National MS Center in Melsbroek were recruited. One scheduled teleconsultation was performed in each participant by a trained medical student, using the Zebra Academy platform. Patients were provided a hyperlink leading them directly to the virtual waiting room. Teleconsultation was considered feasible if at least 80% of the scheduled visits could be completed. Patient satisfaction was evaluated by means of 5-point Likert scales containing the categories very unsatisfied, unsatisfied, neutral, satisfied and highly satisfied.

Results

Median (range) age and Expanded Disability Status Scale scores of the participants were 41 (27-62) years and 4.0 (0.0-6.5), respectively. Seventeen out of 20 teleconsultations were successfully completed (85%). Failures were due to subjects not responding (2/20) and technical issues (1/20). Rates of patients declaring to be satisfied or highly satisfied were 17/17 for technical quality, 15/17 for convenience and 16/17 for overall quality of care.

Conclusion

Planned audiovisual teleconsultation over the internet is feasibly and highly appreciated in patients with MS. We are currently conducting a larger and unique trial exploring the potential of longitudinal patient monitoring with this system over one year.

References

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