The TeleCheck-AF project on remote app-based management of atrial fibrillation during the COVID-19 pandemic: Patient experiences

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Aims: TeleCheck-AF is a multicentre international project initiated to maintain care delivery for patients with atrial fibrillation (AF) during COVID-19 through teleconsultations supported by an on-demand photoplethysmography-based heart rate and rhythm monitoring app (FibriCheck®). We describe the characteristics and experiences from recruited patients.

Methods: Self-reported patient characteristics were obtained from the app. A survey exploring patient experiences completed by 826 patients.

Results: Within 28 weeks, 1930 AF patients were recruited by 38 centers in 14 countries, mainly for remote AF control (31% of patients) and AF ablation follow-up (42%). One-third of patients was in the age range 60-69 years. The most common comorbidity was hypertension (42% of all patients). More than 70% of patients were treated with oral anticoagulation. In total 59.858 heart rate and rhythm measurements were recorded. During the one-week FibriCheck® use, patient adherence was high. Patients performed between 2 and 5 recordings a day and the median number of measurements per patient was 21 [15-29]. The highest average number of measurements per patient was seen in patients older than 80years of age. Patients agreed that the FibriCheck® app was easy to use (94%) and easy to install (89%). The app gave patients a safe feeling (74%) due to being in constant heart rate and rhythm control. More than half of the patients (58%) agreed or strongly agreed that they would like to use the FibriCheck® app in the future. They also found the automated reminders useful (64%).

Conclusions: In the TeleCheck-AF project, mHealth adherence was high, particularly in older patients ≥80 years. The app FibriCheck® is easy to use for 7 days before a scheduled teleconsultation. Patients think that remote rate and rhythm monitoring around teleconsultation by the TeleCheck-AF approach may be an alternative to traditional face-to-face consultations in the future.

Abstract Figure.