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Which educational follow-up method do atrial fibrillation patients prefer: in-person, online or app-based education?

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Background: Atrial fibrillation (AF) is a common cardiac arrhythmia with a complex treatment strategy based on three pillars: anticoagulation, rate and rhythm control, and risk factor management. Compliance with these pillars leads to improved outcomes. Patient education and involvement are fundamental to optimize AF patients' care. There is a need for new strategies to involve patients in their care and raise their awareness of their condition.

Purpose: We are studying three personalized follow-up methods for AF management and wanted to evaluate patients' preference.

Methods: An open, prospective, randomized trial is currently performed at three Belgian hospitals. A total of 1.232 AF patients hospitalized or coming for an out-patient visit were included and randomized to a control group or three education groups: in-person, online or app-based education. The educational intervention focuses on four elements: Improving patients' knowledge about AF, highlighting the importance of OAC adherence using electronic tools, improving self-care capabilities based on their AF risk factors, and reachability of an AF specialized team. Patients in the in-person group were followed personally at the hospital, while the patients in the online and app group received education via an online platform or mobile application, respectively. Patients were followed up for at least 12 months, at which they received a questionnaire to assess their satisfaction about the educational intervention.

Results: On-treatment analyses were performed for 643 patients (292 in-person, 233 online, 118 app-based). When asked for a general score (on ten) to describe their appreciation of the educational intervention, in-person education scored significantly higher (in-person: 8.75 ± 1.25 ; online: 8.30 ± 1.55 ; app: 8.10 ± 1.69 ; p<0.001). Evaluating which follow-up method(s) they would prefer for the future, in-person scored highest (Fig 1), still there was a clear appreciation for the approach they had received in the year before: online scored higher in the online group than in the other groups (in-person: 12.8%; online: 19.9%; app: 10.5%; p=0.023) and app-based higher in the app-group than in the other groups (in-person: 11.5%; online: 89.1%; app: 9<0.001). Moreover, most patients in all groups were satisfied with the answers given to their questions (in-person: 91.6%; online: 89.1%; app: 96.6%; p=0.059) and acknowledged that they had learned more about AF due to the extra education (in-person: 84.2%; online: 85.8%; app: 89.7%; p=0.345). The educational effort improved their motivation to be aware of, and be involved in their health, most significantly in the app group (in-person: 75.4%; online: 77.0%, app: 87.2%; p=0.021).

Conclusion: AF patients are satisfied about additional educational follow-up in general. Despite new electronic tools and the need to come to the hospital, in-person education is subjectively still the preferred modality.



Fig.1: Preferred educational follow-up