

Design, implementation and impact on patient safety of a mobile application for patients on antiretroviral therapy

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What was done?:



FarMCuida® is a mobile application designed for a closer and better pharmacotherapeutic monitorization of patients on antiretroviral therapy (ART).

Why was it done?

Patients are **more active, autonomous and have greater information and communication needs.**

Objectives:

- Allow patients to **participate in their illness and/or treatment**, promoting their compliance and safety and communication with the healthcare professional.
- Strengthen **pharmacotherapeutic monitoring** of patients receiving ART, avoiding visits to the emergency room and hospital consultations.
- **Generate pioneering evidence** on the impact of mobile applications on the pharmacotherapeutic monitoring of patients on ART.

How was it done?

- A multidisciplinary group was created to design and develop FarMCuida®
- Identification and inclusion of candidate patients was performed in the Pharmaceutical Care Consultation of the Pharmacy Service.
- The pharmacists responsible for the Infectious Diseases area performed real-time pharmacotherapeutic follow-up of the patients.
- Records of adverse effect (AE) and Safety-related messages received (Adverse effects, interactions, drug administration) are analyzed.



What has been achieved?:

- **152 patients** were included
- **58 adverse events (AEs)** were registered
 - 22% of the patients registered at least 1 AE
- **32% of patients used the Messages module**
 - 126 telematics consultations were carried out
 - 205 messages were exchanged between the patient and the pharmacist.
- **43%** of the consultations were doubts about **interactions**
 - Three type D interactions and one type X interaction were identified.
- **11%** of the consultations corresponded to doubts about the **administration of ART**
- **5.2%** were related to **adverse effects** experienced by the patient.

At least **3 visits to the emergency department were avoided**, resulting in health care and economic savings for the health system.

What next?

Based on the limited studies on the impact of mobile applications on the pharmacotherapeutic follow-up of patients, the results obtained will allow us to **generate evidence** in this regard.

It is worth highlighting the flexibility **FarMCuida®** design, being **easily adaptable** to different pathologies and hospital centres.

