

Self-administration of biologics for severe asthma - development of an app – a qualitative study

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Introduction



339 million people estimated with asthma worldwide (2016)



The prevalence of asthma in Denmark is about 7-11%. According to a Danish study 8 % of patients with asthma were classified with severe asthma.

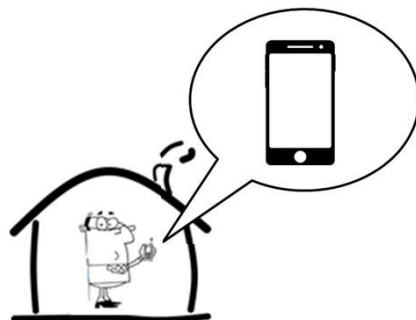


Danish Severe Asthma register (DSAR) is a new Danish nation-wide asthma database involving patients with severe asthma. The database work as an electronic patient record and aims to be a working tool for diagnosis, management and control with patients in biological treatment. Patients answer questions during scheduled injection visits in outpatient clinics.

Explanation

Biological treatment has been approved for at-home use. Patients save time and money by not having to attend injection visits and outpatient clinics release resources to other patients with a greater need for physical consultation. However, this means that data is not being transferred to the DSAR record system.

Additionally, a recently published survey shows that 44% of the 432 patients were concerned making mistakes while injecting at home.



The aim of this study is to develop an app for severe asthma patients who are self-administering biologics at home. In that way it will be possible to obtain valuable knowledge to the DSAR record system. Additionally the app should be designed so it supports the patients self-administration at home. This in order to prevent some of the concerns from the patients and physicians.

Methods

This qualitative study was based on a semi-structured focus group focusing on what the patients considered useful in a clinical app.

We chose a focus group to use the patient's interaction and group dynamic.

Patients, already in biological treatment, were recruited from the outpatient clinic at Vejle Hospital, Denmark. The interview took place Oct 2019 and lasted 1½ hour.

Inclusion criteria: Patients ≥ 12 years with severe asthma treated with biologics who were interested in self-administration at home.

A semi-structured interview guide was developed. The interview consisted of open-ended and follow-up questions with few specific questions addressed the functionality of the app.

An audio recorder was used for data collection and the interview was transcribed.

The interview was analysed using meaning condensation in connection to the phenomenological approach.



Results

15 out of 30 patients treated with biologics were asked chronological about participation. 8 patients accepted.

3 themes had a relation to the phenomenon:

- User friendliness in the app – “Keep it simple”.
- Participation in own treatment with the app.
- Managing the treatment and the illness with the app.

Selected quotations from the interview illustrates the above themes:

“It is important that we have easy access to the relevant information. You can make a link in the app”.

“How do we store the medication in our own fridge? How do I get new medication? These things need to be clear in the app”.

“First and foremost it needs to be simple. The app must consist of both text and pictures”.

“It would be nice to be able to do the injection at another time of the day..”

Main Finding

Conclusion:

With the DSAR app it becomes possible to collect data to DSAR regarding symptoms and compliance during home administration. By involving patients in the development of the app, we produce a tool targeting patients with severe asthma.