



## TELEMEDICINE EXPERIENCE FOR SEVERE ASTHMA CARE: A DEVELOPING COUNTRY PERSPECTIVE



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### BACKGROUND

**Telemedicine** can be defined as the provision of health care and services through **information and communication technologies** when distance is a critical factor. In developed countries, telemedicine is already well established as an integrated part of professional-patient care and is effective in preventing and controlling chronic diseases, such as **asthma**. However, in **developing countries such as Brazil**, where approximately 20 million people have the disease, telemedicine has not yet been widely adopted as a potential tool for **asthma control**.

#### AIM

To describe the experience of **telemedicine use for patients with severe asthma** in a specialized center in the city of Salvador, Bahia, **Brazil**.

#### METHOD

**Experience report on a clinical study** that used a telemedicine tool to monitor patients with severe asthma. The clinical study was approved by the research ethics committee in Brazil.

### RESULT

A total of **129 severe asthmatic patients** were followed for a period of **6 months to 1 year** (2018-2019) by the telemedicine tool. A **team of nurses** was responsible for performing the procedures. The experience was divided into steps:

1

#### Usability of the telemedicine

- Telemedicine platform
- Guiding protocol: based on up-to-date scientific evidence
- Accessible and relatively inexpensive material resources
- Good practical use of the telemedicine

2

#### Health outcomes

After telemedicine intervention: the participants had an improvement in both the correct use of inhaler devices and knowledge about asthma, as well as a reduction in reports of hospitalizations and emergency visits

3

#### Ethical aspects

- The main ethical issues related to telemedicine processes were respected, ensuring the participant's data security and privacy
- Telemedicine platform: reserved, where only research nurses had access

4

#### Challenges and perspectives

- Developing countries: simple and easily accessible alternatives should be chosen
- Focusing on the patient and their individualities, based on current scientific evidence, especially in chronic conditions such as asthma

### CONCLUSIONS

The use of telemedicine-based interventions is a **complementary** and **clinically viable** alternative for effective health care for asthmatic patients. For **developing countries**, experiences such as ours may be able to encourage **self-management of asthma**, reducing direct and indirect **disease costs**, as well as being an applicable and reproducible model for other **chronic diseases**.

#### Acknowledgements:

