

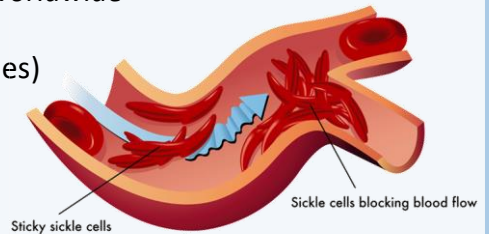
# Preliminary Evaluation of a mHealth Coaching Conversational Artificial Intelligence (AI) for the Self-Care Management of People with Sickle-Cell Disease (SCD)

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## Introduction

*Sickle-Cell Disease (SCD): the most prevalent monogenic disorder worldwide*

- more than **300 million people** affected
- life expectancy stagnates around 42 years (High-income countries)
- causes **acute pain episodes** and **life-threatening complications**
- treatment options are limited
- complex **lifestyle behaviours** can improve quality of life
- **only 1% of SCD patients** are able to properly self-manage
- studies have shown that AIs could **support patient empowerment**
- **no research has been done** to design conversational AIs for people with SCD



## Methodology

Co-design sessions

Interviews and Focus Groups

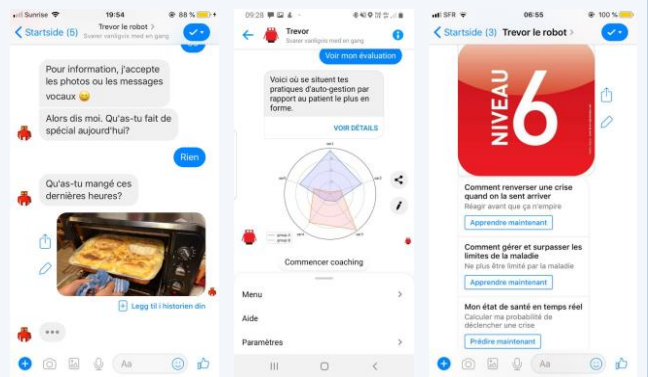
Usability Evaluation and Usefulness Surveys

## Results

N = 17

Age min: 19  
Age max: 59

88% said: *"The chatbot contains all the information I need"* (score > 3/4)  
58% declared: *"The bot encouraged me to be more active in order to improve my condition"* (score > 3/4)



## Conclusion

Conversational AIs for health coaching could be used to promote the knowledge acquisition of recommended self-care practices related to symptoms prevention