@Migrebot

interactive Facebook & Telegram headache diary



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Chats

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Background

Headache diary (HD) is the best way of objective assessment of the patients' headache. HDs are widely used for correct diagnosis and for effective management of migraine and other headaches. Paperbased HDs are less valid because of suboptimal patient compliance to diary completion. Our aim was to create the interactive HD with high patient adherence and easy to use.

Unlike other electronic HDs on the market which need to be installed on the smartphones, we used the platform of commonly used messengers Facebook and Telegram. Another important difference is that we used interactive method of data capturing.

The whole process of HD completion is based on chatting in messenger like chatting with the friend. For example, the start of the day session is: «Hi! Did you have a headache today?»

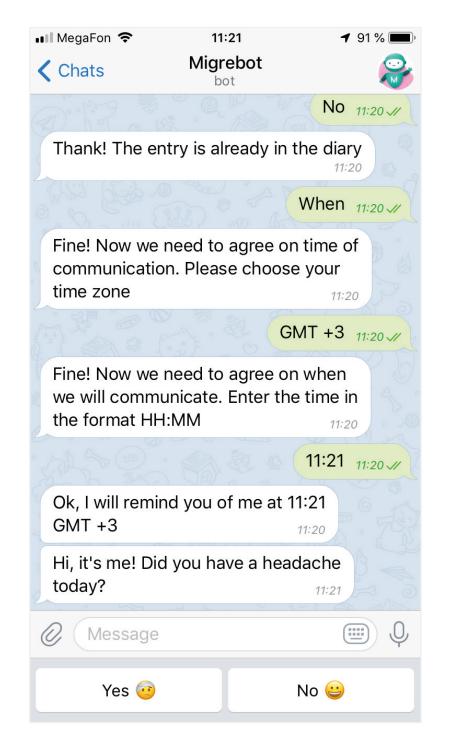
Our aim

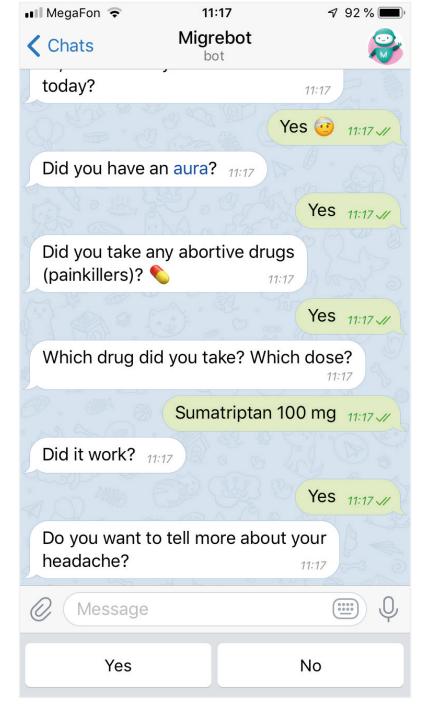
Our objective was to create simple and user friendly headache diary. To raise the adherence of patients for diary completion we created two dialogue scenarios.

Short scenario

The short version captures only frequency of headache (and/or auras). This information is the most important for diagnosing of chronic headaches and for preventive treatment monitoring. And is perfect for the patients tired of long questionnaires. If the patient is willing to tell more about his attack, he could continue filling the long version of diary.







| 💶 MegaFon 🕏 | 11:18 | √ 92 % 🔙 |
|----------------------------|----------------------------|--------------------|
| C hats | Migrebot bot | |
| way: | Dot | 11:17 |
| | | Yes @ 11:17 // |
| Did you ha | ave an aura? 11:17 | |
| | | Yes 11:17 // |
| Did you ta (painkillers | ke any abortive d s)? 🌕 | rugs 11:17 |
| | | Yes 11:17 // |
| Which dru | g did you take? V | Vhich dose? |
| | Sumatripta | an 100 mg 11:17 // |
| Did it work | ? 11:17 | |
| | | Yes 11:17 // |
| Do you wa headache | nt to tell more ab ? | oout your |
| | | No 11:18 // |
| Thank you | , I added a diary | entry. 11:18 |
| | | |

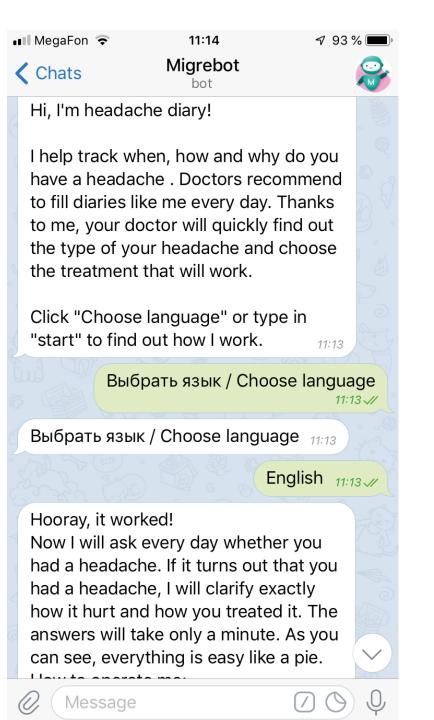
| ate | Headache | Aura | Acute medication | Drug, dose | Drug efficacy | Pain intensity | Location | Quality | Aggravation | Nausea | Photophobia | Phonophobia | Triggers | Which triggers | Duration | More |
|----------|----------|------|------------------|---------------|---------------|----------------|------------|-----------|-----------------------------------------|---------------|-------------|-------------|----------|-----------------------------|----------|------|
| 17.08.19 | No | No | | | | | | | 7 1000000000000000000000000000000000000 | 7 10 10 10 10 | | | | 17.534.00.00.00.00.00.00 | | |
| 16.08.19 | No | No | | | | | | | | | | | | | | |
| 15.08.19 | No | No | | | | | | | | | | | | | | |
| 16.08.19 | Yes | Yes | Yes | Sumatriptan 1 | Yes | | | | | | | | | | | |
| 17.08.19 | Yes | No | Yes | Ibuprofen 600 | Yes | 9 | Left side | Pulsating | Yes | Yes | No | No | Yes | skipping meal, little sleep | 02:30 | |
| 18.08.19 | No | No | | | | | | - | | | | | | | | |
| 19.08.19 | Yes | Yes | Yes | Ibuprofen 600 | Yes | 9 | Right side | | No | No | No | No | No | | 11:09 | |
| 20.08.19 | Yes | Yes | Yes | Ibuprofen 600 | Yes | 9 | Right side | Pulsating | Yes | Yes | No | No | Yes | skipping meal, little sleep | 03:00 | |
| | | | | | | | | 1000000 | | | | | | | | |
| | | | | | | | | | | | | | | | | _ |

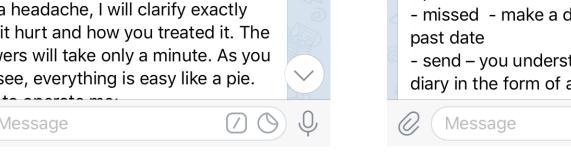
The statistics of headache could be sent by to the email in Excel file.

Discussion

By using interactive chat-bot headache diary several advantages over paper-based and other e-diaries are being offered, including the alarms to remind patients to complete diary, minimization of missing data since the chat-bot programmed to prevent the skipping or exclusion of diary items and convenient chatting format of data entry.

Any questions? Write to Kirill Skorobogatykh to post.kirill@gmail.com





Click "Choose language" or type in "start" to find out how I work. Выбрать язык / Choose language Выбрать язык / Choose language English 11:13 Hooray, it worked! Now I will ask every day whether you had a headache. If it turns out that you had a headache, I will clarify exactly how it hurt and how you treated it. The answers will take only a minute. As you can see, everything is easy like a pie. How to operate me: - stop – stop me - start – start me again when – choose the polling time pain – make unscheduled record - missed - make a diary record for the - send – you understood right: send a diary in the form of an .xlsx table by Setting-up

Migrebot



Post.kirill@gmail.com 11:15

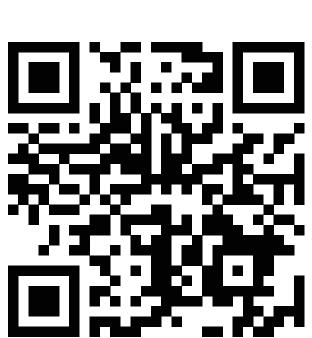
Let's check. Is this a correct email? Post.kirill@gmail.com Yes 11:15 Have you ever had a migraine aura? If yes, then I will ask about it too Fine! Now we need to agree on time of communication. Please choose your time zone GMT +3 11:15 V Fine! Now we need to agree on when we will communicate. Enter the time in 11:17 11:15 Ok, I will remind you of me at 11:17 **GMT** +3 (A) (A) Message

Full scenario

Starting the chat-bot

The long version include the assessment of different characteristics of the attack (triggers, intensity, quality of pain, accompanying symptoms, abortive medication used etc.).





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Migrebot interactive headache diary was successfully launched on January 2019 in Telegram messenger and on August 2019 in Facebook messenger (beta version).

Just find the contact @migrebot on Telegram or Facebook messenger (beta version)

