SMART MEDICAL COMMUNICATOR FOR ESTIMATING ABNORMAL UTERINE BLEEDING

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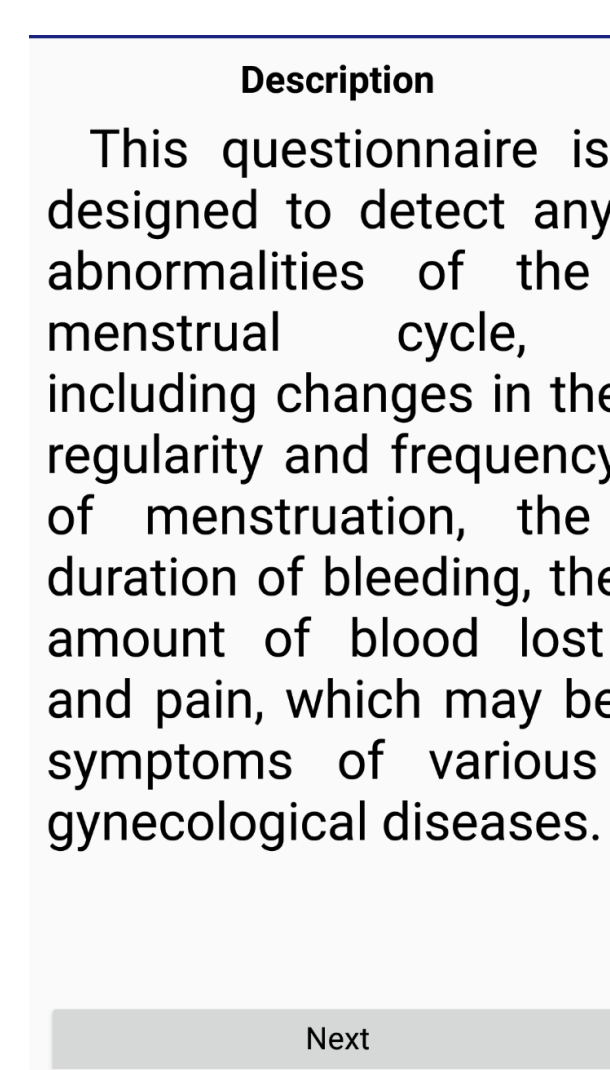
Abstract

The authors developed smart communicator with application software for estimating abnormal uterine bleeding based on the abnormal uterine bleeding questionnaire according to The International Federation of Gynecology and Obstetrics

Recently, a lot of new evidence has been accumulated, which has led to a revision of diagnostic approaches and treatment regimens for uterine bleeding in women of reproductive age. Abnormal uterine bleeding (AUB) is a general term for any deviation of the menstrual cycle from the norm, including changes in the regularity and frequency of menstruation, the duration of bleeding or the amount of blood lost.

In modern medical diagnostics, various questionnaires are widely used, including those recommended by the World Health Organization. It is important to have informational support for them. The abnormal uterine bleeding criteria were developed based on The International Federation of Gynecology and Obstetrics and the protocol. It is a questionnaire and it consists of seven questions. The analysis of answers for the questions made it possible to identify issues that at the level of the initial consultation allow to identify the contingent of patients who need additional examination for the diagnosis of AUB.

The goal of the work is to develop smart communicator with application software to automate the abnormal uterine bleeding questionnaire on a mobile tablet computer-base. To develop application software for proposed medical communicator there were used Java programming language and integrated environment Android Studio 4.2.2, which provides storage of survey data and calculating the indicators of AUB on recommended scales. An appropriate database has been created.
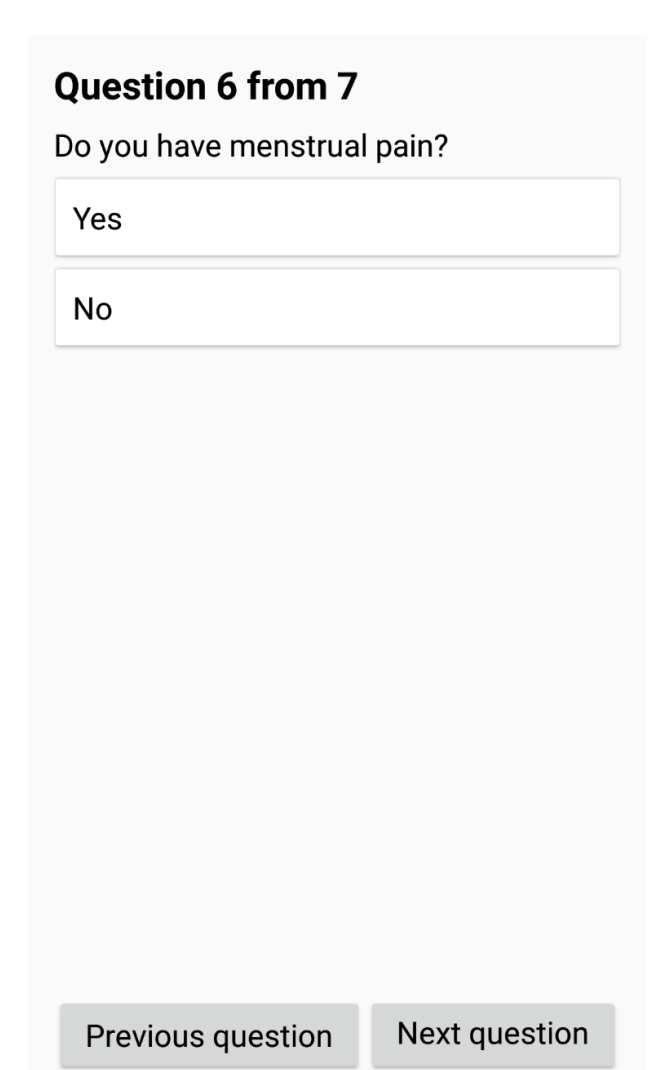
APPLICATION

Fig . 1 Main window of software
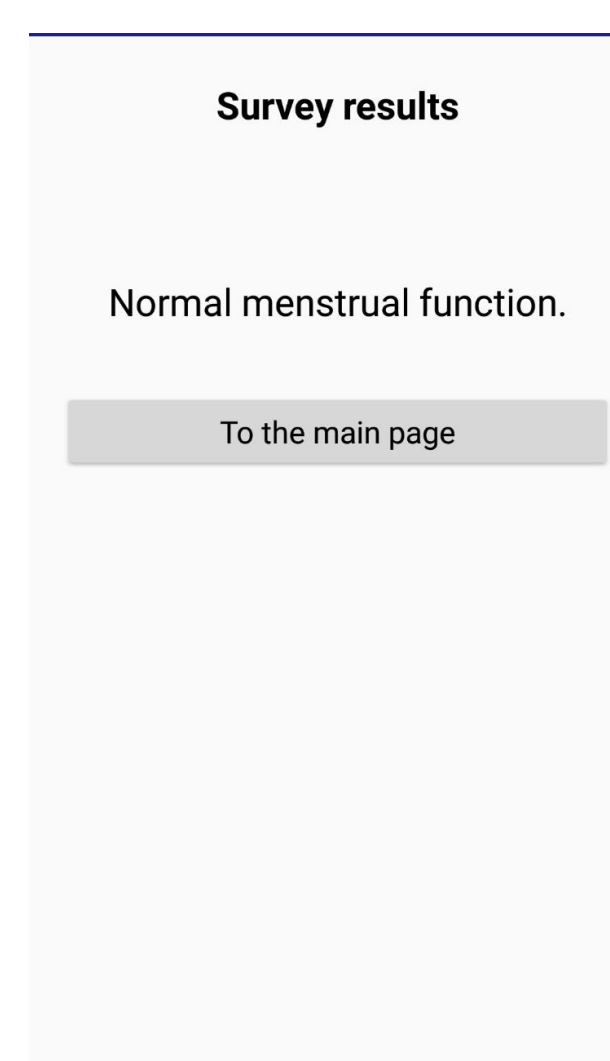
Fig . 2 Example of question
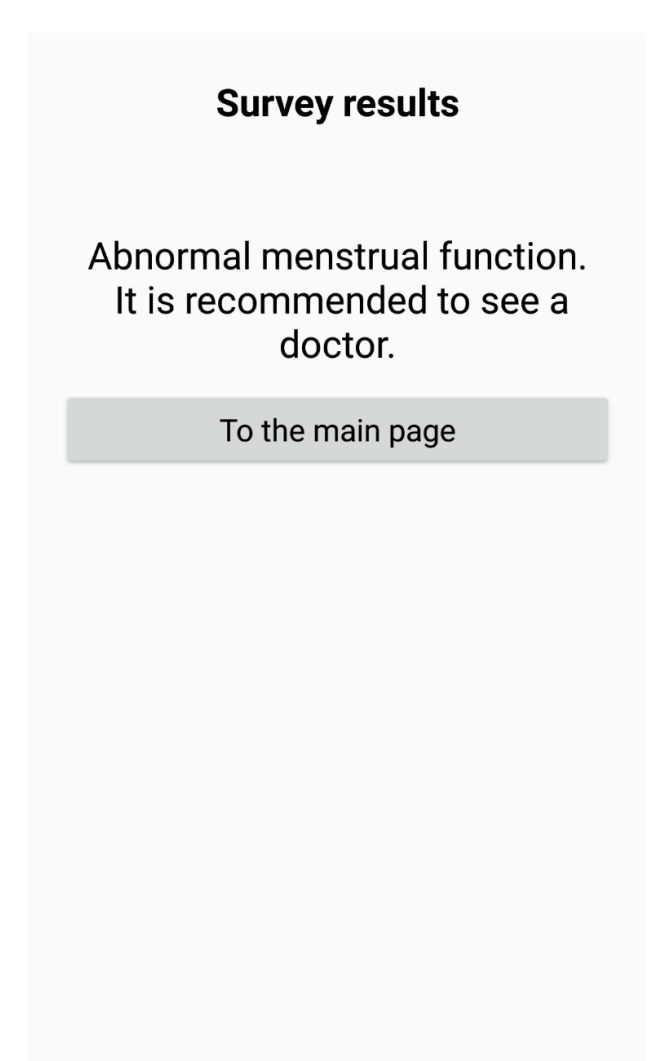
Fig . 3 Survey result if menstrual function is normal

Fig . 4 Survey result if menstrual function is abnormal

Conclusion

Smart communicator with application software for estimating abnormal uterine bleeding based on the abnormal uterine bleeding questionnaire was developed. The results of which can serve as information support to identify the contingent of patients who need additional examination for the diagnosis of abnormal uterine bleeding.