

P244. Development of a smartphone application system for symptom-recording to manage premenstrual syndrome and its clinical use

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Context: The clinical diagnosis of premenstrual syndrome is based on the prospective daily recording of symptoms. However, having patients maintain detailed records with paper and pen to be shared with the doctor could be seen as burdensome and very impractical in today's society.

Objective: We developed a novel system of symptom-recording with the use of a smartphone application (app) which collects and saves data concerning women's daily health conditions. This study aimed to investigate whether the system would be accepted by outpatients and how it could be utilized in a clinical therapeutic course of premenstrual symptoms.

Methods: A feasibility study and a case report of severe premenstrual disorder for more than three years.
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Participants: 28 female outpatients of the gynecological department at Kyoto University Hospital, displaying gynecological problems such as dysmenorrhea, menorrhagia, and/or premenstrual symptoms.

Intervention: As a feasibility study, the 28 participants were randomly divided into 2 groups and asked to conduct recordings for 84 days; using the smartphone app (in the app group) or by paper and pen (in the paper group).

Main Outcome Measures: We collected the results from a questionnaire survey and compared the usability and the acceptability of the recording methods.

Results: Results showed the app group felt more "connected with the doctor" while the paper group was more reflective and encouraged to better self-care. A long course of pharmacological and supportive intervention with the app-recording exhibited alleviation of severe symptoms associated with the menstrual cycles, which was clearly and objectively displayed by the ICT system.

Conclusions: It was suggested that recording with a smartphone app is easier for the user to fulfill, and that the data-sharing system might promote better doctor-patient communication.

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