

المؤتمر الصحي الدولي الرابع لزيارة الاربعين

چهارمین کنکر و بین المللی سلامت در اربعین

Title:

Artificial Intelligence-based Self-care after-Surgery Continuous Monitoring in Mass Gathering Medicine for Arbaeen Health

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The 4th International Congress on Health in Arbaeen چهارمین گذاره بین المللی سلامت در اربعین



• One of the greatest gatherings is the Arbaeen Pilgrimage in which a huge number of pilgrims walk toward Imam Hossain (AS) as a symbol of keeping his way.





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Aims

Among the pilgrims gathering, some pilgrims perform surgery and their surgeon approves their travel. However, continuous monitoring is recommended for them.

In this paper, an Artificial Intelligence (AI) self-care system for after-surgery continuous monitoring that can assess risk issues is presented.





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Materials & Methods

This AI-based system using wearable sensors monitors critical factors, analyzes related risks, and performs alarms for both the patient and the surgeon to recommend proper treatment.

Here, we use a multimodal data and deep learning strategy to model the monitoring system and the result is sent to the Internet of Things gateway for performing proper alarming.





Results

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After surgery, patients with surgeon approval are among Arbaeen pilgrims.

However continuous monitoring of them is required.

In this paper, an AI-based self-care system for after-surgery continuous monitoring is proposed.

The alarms also can be connected to Mokebs for any urgent medical interventions.



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References

[1] Scott Mayer McKinney et al, "International evaluation of an AI system for breast cancer screening," Nature volume 577, pages89–94 (2020)

[2] Ioannis Papathanail et al, "A feasibility study to assess Mediterranean Diet adherence using an AI-powered system, "Scientific Reports volume 12, Article number: 17008 (2022)

[3] Hamid Behravan, Predicting breast cancer risk using interacting genetic and demographic factors and machine learning, Scientific Reports volume 10, Article number: 11044 (2020)

[4] Karim Bayoumy Et al., "Smart wearable devices in cardiovascular care: where we are and how to move forward," Nature Reviews Cardiology, vol. 18, pp. 581–599, 2021.

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