

Chapter 16

Use of an Intelligent Voice Recognition Device to Monitor and Mitigate Children With Anxiety-Induced Asthma Attacks


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ABSTRACT

In this research, the use of Alexa for monitoring patients with asthma anxiety attacks was evaluated. Twenty-seven dates in the current year were randomly selected and the duration of anxiety attacks in seconds was recorded, as well as their severity on a Likert scale ranging from 1.00 to 7.00. The results showed that the duration of anxiety attacks ranged from 47 to 287 seconds, with a mean of 163.7 seconds. In addition, a positive correlation was found between the duration of anxiety attacks and severity according to the Likert scale. These findings suggest that Alexa monitoring could be a useful option for the evaluation and treatment of patients with asthma anxiety attacks. Based on these findings and suggestions, the authors propose the integration of a mechatronic system that uses the conjunction of

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