SMS

Prospective observational cohort studies

Spinal cord stimulation is a possible treatment option for pain management; however, patients undergoing this intervention require close follow-up, which is not always feasible. eHealth apps offer opportunities for improved patient follow-up, although adherence to these apps tends to decrease over time, with rates dropping to approximately 60%. To improve adherence to remote follow-up, we developed a remote follow-up system consisting of a mobile app for patients, a website for health care professionals, and a remote support center.

The objective was to evaluate patient adherence to remote follow-up using a system that includes a mobile app and a remote support center.

After review of the literature and approval of the design of the follow-up system by a multidisciplinary committee, a team of experts developed a system based on a mobile app, a website for health care professionals, and a remote support center. The system was developed in collaboration with health care professionals and uses validated scales to capture patients' clinical data at each stage of treatment (ie, pretreatment phase, trial phase, and implantation phase). Data were collected prospectively between January 2020 to August 2023, including the number of total surveys sent, surveys completed, SMS text message reminders sent, and reminder calls made.

A total of 64 patients were included (n=40 women, 62.5%) in the study. By the end of the study, 19 (29.7%) patients remained in the pretreatment phase, 8 (12.5%) patients had completed the trial phase, and 37 (57.8%) reached the implantation phase. The mean follow-up period was 15.30 (SD 9.43) months. A total of 1574 surveys were sent, along with 488 SMS text message reminders and 53 reminder calls. The mean adherence rate decreased from 94.53% (SD 20.63%) during the pretreatment phase to 65.68% (SD 23.49%) in the implantation phase, with an overall mean adherence rate of 87.37% (SD 15.37%) for the app. ANOVA showed that adherence was significantly higher in the earlier phases of treatment (P<.001).

The remote follow-up system, supported by a remote support center improves adherence to follow-up in later phases of treatment, although adherence decreased over time. Further studies are needed to investigate the relationship between adherence to the app and pain management [1].

This study represents an important step in understanding the role of eHealth in managing SCS follow-up. While it demonstrates the potential to improve adherence, it leaves key questions unanswered regarding the relationship between adherence and clinical outcomes. Addressing these gaps in future research could significantly enhance the design and implementation of remote follow-up systems, ensuring both patient engagement and improved clinical care.

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Gómez-González MA, Cordero Tous N, De la Cruz Sabido J, Sánchez Corral C, Lechuga Carrasco B, López-Vicente M, Olivares Granados G. Following Up Patients With Chronic Pain Using a Mobile App With a Support Center: Unicenter Prospective Study. JMIR Hum Factors. 2025 Jan 22;12:e60160. doi: 10.2196/60160. PMID: 39844381.