Medical-Surgical Nurses and a Smart Watch: Promoting Healthier Lifestyles, a Pilot Study
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Purpose: Although healthy nurses are the best role models for patients, families and communities, nurses are less healthy than the average American (American Nurses Association, 2017). Evidence supports that nurses who are physically healthy, practice health promotion, and possess resilience, mindfulness, and self-compassion, are less likely to suffer compassion fatigue and burnout (Cocker, 2016; Nolte, Downing, Temane, Hasing-Tolsma, 2017). A nursing led interprofessional research team designed a study to engaged clinical nurses using smart technology to identify options for improving wellness and promoting healthier lifestyles. The aim of the study was to determine the feasibility of using electronic data and self-report to measure physical parameters, perceived stress level, acute and illness incidence to assess the possibility of predicting stress response, acute illness, and impact of wellness activities.

Methods: With approval from IRB, 39 medical-surgical nurses with personal or loaner smart watch were recruited for study. Nurses agreed to participate in at least 2 of the 4 study components (stress, acute illness, activity, & breathe). Data was collected for 3 months before and after dissemination of a health promotion toolkit. A cell phone app was used to collect participant responses on previously validated instruments measuring professional quality of life (PQOL), acute illness and stress levels, along with physiologic and activity data from the smart watch. Cross-sectional and longitudinal data analysis focused on determining the feasibility of predicting stress response, acute illness, and impact of wellness activities in nurses.

Results: Sample of nurses mirrored population in the organization: half (51%) reported 3 years or less experience; 70% hold a BSN and 54% specialty nursing certification. Majority worked days, 36 to 45 hours per week, and 23% worked second job. Half of the nurses reported exercising regularly while 40% reported chronic health concerns. Only 12% reported leaving the unit during breaks. Median daily stress score was 2 on 1-5 scale with 23% reporting a high level of perceived stress. Majority (65%) of nurses report thinking about work while off the clock, 45% reported work-related stress impacts relationships. No statistically significant change in stress levels or PQOL longitudinally.

Conclusion: Although stress & PQOL were not significantly impacted, pilot demonstrated feasibility of using smart technology to measure nurses’ responses. Insight into health and lifestyle characteristics of medical-surgical nurses allows customization of self-care initiatives by organization and for future studies.

Title:
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Abstract Summary: Nursing led pilot study paired nurses at large academic medical center with smart watches and cell phone application to identify options for promoting healthier lifestyles. Insight into health and lifestyle characteristics of nurses helps customize health promotion toolkit as well as self-care initiatives for the organization and future studies.

References:

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Author Summary: Dr. Heather Craven is a certified medical-surgical nurse with more than 35 years or experience at academic medical centers in a variety of roles including staff nurse, manager, staff development, and unit based clinical nurse specialist. After relocating to South Carolina seven years ago, Dr. Craven accepted a newly created role of Nurse Scientist to help MUSC continue to build and sustain the integration of evidence-based practice and nursing research within the organization.

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