Enhancing Immunization Rates at Aurora Family Medicine Clinics in Milwaukee, Wisconsin

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Recommended Citation
Background: Patients often present to the emergency department (ED) for pain. As opioid fatalities rise, alternative treatments in the ED are warranted for pain management. Acupuncture, a nonpharmacological treatment involving the insertion of needles into skin or tissue at specific points within the body, may help to decrease acute pain experienced by patients seeking ED services.

Purpose: To assess the utilization and impact of acupuncture in the ED setting for pain management.

Methods: We conducted a prospectively designed and retrospectively reviewed quality improvement study. Patients ≥ 18 years old who presented to the Aurora West Allis Medical Center ED (West Allis, WI) during 2017 were offered acupuncture services from an acupuncturist based on their emergency severity index score (highest severity [1] – lowest severity [5]), reason for visit, and, ultimately, their physician’s recommendation. Charts were further reviewed for other demographic and visit characteristics. Demographic characteristics were described using basic summary statistics. Wilcoxon signed-rank tests were used to determine differences in pre- and postacupuncture pain, stress, anxiety, and nausea scores (ie, no pain [0] – worst pain [10]).

Results: A total of 379 patients, mean age 47.5 years and mean body mass index 30.8 kg/m², received acupuncture services. Patients were predominately female (68.1%) and non-Hispanic white (77.0%) and presented with an emergency severity index score of 3 (68.9%) or 4 (24.8%). Following enrollment, patients had 8–15 needles placed (86.0%) and received either 20 or 30 minutes of needle time (92.6%). Median pre- and postacupuncture pain (7.0 vs 3.0), stress (7.0 vs 0.0), and anxiety (5.0 vs 0.0) scores were significantly different (P<0.001). Differences in median pre- and postacupuncture nausea scores were not significantly different, as most patients reported no nausea preacupuncture (70.7%). Overall, patients mean length of stay in the ED was 194 minutes, with 10.6% of patients admitted to the hospital. Only 2.1% of patients presented to the ED twice within 24 hours, and none received acupuncture services more than once. Following discharge from the ED, <2% received acupuncture services within 30 days.

Conclusion: Patients admitted to the ED experienced significant decreases in pain, stress, and anxiety. It is unknown whether this decrease was due to acupuncture therapy and not the synergy between opioid and acupuncture use. Ultimately, while further study is warranted, acupuncture may be an alternative treatment to opioid use during the ED admission.

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Background: In the United States, only 72.2% of children (age 19–35 months) are up-to-date on all of their immunizations. This rate is even lower for children from impoverished households (68.7%). Lack of encouragement by providers, as well as parent perceptions of vaccine safety and efficacy, have been cited as some of the reasons for lower vaccination rates.

Purpose: Our study aimed to collect and compare patient demographic data to age appropriate and comorbidity-specific vaccination rates.

Methods: We conducted a quality improvement study at Family Practice Center (Aurora St. Luke’s Medical Center, Milwaukee, WI) and Family Care Center (Aurora Sinai Medical Center, Milwaukee, WI). Patients who were seen by either a PGY-2 or PGY-3 resident provider from July 2017 to September 2017 were included. Charts were randomly selected and reviewed. Using Minitab, one-way ANOVAs were generated for multivariable data, Fisher’s exact tests were used for 2 × 2 tables, and binary logistic regression was used for vaccine completion outcomes. A P-value less than 0.05 was used to determine statistical significance.

Results: A total of 872 patients were reviewed, of which 59.3% were female, 45.7% were African American, 11.0% were refugees, and 61.0% were insured by Medicaid. Of the comorbidities studied, the most prevalent were heart/lung disease (36.9%, n=322), liver disease (4.9%, n=43), and diabetes (15.7%, n=137). Overall vaccination rates were found to be higher than national averages for children 19–35 months old (85.7% [n=28] vs 72.2% nationally). Adults ≥ 65 years of age also had higher rates of pneumococcal polysaccharide vaccine (PPSV23) immunizations (77.8% [n=90] vs 63.6% nationally). Differing rates of PPSV23 were seen for those suffering from heart/lung disease (47.2%), liver disease (39.5%), and diabetes (68.6%). Also, differing rates for hepatitis B vaccination were seen among those with liver disease (41.9%) and diabetes (26.6%). The following groups of patients had higher rates of missed opportunities: Medicare patients (P<0.001), Caucasian patients (P<0.001), and patients at Family Practice Center (P=0.043). A greater percentage of individuals were up-to-date on the adult dose of tetanus, diphtheria, and pertussis (Tdap), hepatitis B, and human papillomavirus (HPV) vaccines at Family Practice Center versus Family Care Center.

Conclusion: Baseline immunization rates at Aurora’s family medicine clinics in Milwaukee, Wisconsin, are higher than national averages. However, these rates significantly differed between clinics. Analysis of postintervention data, collected following 3 lectures given to nurses and medical assistants, will be carried out to determine the effects of the educational intervention on immunization rates.

Refugees in Milwaukee: Demographic and Health-Related Characteristics Post-Immediate Resettlement

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Background: Since 2002, more than 13,000 refugees have resettled in Wisconsin, with two-thirds of that population residing in the city of Milwaukee.

Purpose: To explore the demographic and health-related characteristics of a growing and dynamic refugee population in Milwaukee.

Methods: We conducted a retrospective chart review of 122 established refugee patients at two family medicine residency clinics.

Results: Of the initial 268 patients who underwent the initial refugee examination, 122 (mean age: 26 years; gender: 54.0% male, 45.9% female) established care with a provider at one of the two studied primary care clinics at least 8 months after their