

BRIEF REPORT

Brief Report: Healing Touch Consults at a Tertiary Care Children's Hospital

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BACKGROUND AND OBJECTIVES: Components of complementary and alternative medicine are increasingly being implemented at academic medical centers. These approaches include therapeutic touch or healing touch (HT), an energy-based therapy using light touch on or near the body. Limited data exist regarding complementary and alternative medicine use at children's hospitals. The aim of this study was to evaluate patterns and clinical characteristics of HT consultations among children hospitalized at Nemours/A.I. duPont Hospital for Children.

METHODS: We conducted a retrospective chart review of all patients hospitalized from January 2012 through December 2013, comparing patients who received HT consultations with those who did not.

RESULTS: There were 25 396 admissions during the study period; 882 (4%) of these, representing 593 individual patients, received an HT consultation. As compared with those without an HT consultation, patients receiving HT were older (median 12 years vs 5 years, $P < .001$), female (58% vs 46%, $P < .001$), and more likely to be admitted to the hematology/oncology or blood/bone marrow transplant units ($P < .001$). Patients with HT consultations had longer hospitalizations (median 121 hours vs 38 hours, $P < .001$) and more medical problems (median 12 vs 4, $P < .001$). Six attending physicians were responsible for placing the majority of HT consultations. Of the 593 patients receiving an HT consultation, 21% received ≥ 2 consultations during the study period.

CONCLUSIONS: Certain patients, such as those with longer hospitalizations and more medical problems, were more likely to receive HT consultations. Many patients received multiple consultations, suggesting that HT may be an important aspect of ongoing care for hospitalized children.

ABSTRACT

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Complementary and alternative medicine (CAM), defined as health care practices developed outside of mainstream Western medicine, is frequently used in the United States.¹ CAM modalities include herbal medicines, acupuncture, and biofield (magnetic field around the body) therapies such as healing touch (HT). The integration of CAM with Western medicine in pediatrics and elsewhere has recently received attention.²

A 2012 survey revealed that 34% of American adults and 11.6% of children aged 4 to 17 years used ≥ 1 CAM modality during the previous year.^{3,4} Children who use CAM vary in age and health status; 20% to 40% of healthy children in ambulatory settings use CAM,⁵⁻⁷ and children with special needs use CAM even more frequently.⁸ Notable users of CAM include children with cerebral palsy,⁹ cystic fibrosis,¹⁰ gastrointestinal problems,^{11,12} and cancer.^{13,14} In 2008, the American Academy of Pediatrics published guidelines for the use of CAM in children.¹⁵ CAM use at academic medical centers has also increased recently.¹⁶ The Academic Consortium for Integrative Medicine and Health includes >60 members who use integrative medicine in clinical care, education, and research.¹⁷ However, limited data have emerged regarding CAM at academic children's hospitals.¹⁸ One study at a children's hospital found that most CAM consultations were for oncology patients seeking management of pain, insomnia, and anxiety.¹⁹ Yeh et al²⁰ found a trend toward improvement in children's chemotherapy-induced nausea and vomiting when they received acupuncture. Another study at a children's hospital found that providers report awareness of their patients' CAM use and may recommend CAM modalities but do not typically communicate with CAM providers.²¹

HT is a biofield modality used in adults and children^{22,23} performed by a trained provider using either light touch or manipulation of the area above the patient to facilitate health and well-being. At some institutions, nurses have led initiatives to bring HT to patients and staff.²⁴ Postulated mechanisms of action involve manipulation of the patient's energy fields to support the body's

healing process or as a relaxation technique. Although HT has not been without controversy,²⁵ and some studies have shown mixed results,²² HT has been offered at several institutions, especially to adult²⁶ and pediatric patients with cancer.²⁷ In children with cancer, HT has been shown to reduce stress and heart rate variability.²⁸

Our children's hospital has offered HT since 2011. This study sought to evaluate patient and provider characteristics of HT consultations at our institution. We hypothesized that HT consultations would occur more frequently for adolescents, girls, and patients with longer lengths of stay. We examined HT use in patients with various diagnoses and hypothesized that significant HT use would occur more often in those with pain, migraines, and psychological and psychiatric complaints compared with patients with asthma, constipation, seizures, and obesity. We chose these diagnoses because they occurred commonly in patients of all ages. We hypothesized that hematology and oncology providers would frequently order HT consultations.

METHODS

Setting

Nemours/A.I. duPont Hospital for Children is a 200-bed children's hospital in Wilmington, DE. All pediatric subspecialties are represented. The hospital contains several general inpatient units, a PICU, a NICU, a pediatric cardiac unit, a pediatric cardiac ICU, a blood/bone marrow transplant (BBMT) unit, and a pediatric hematology and oncology unit. Medical providers include general pediatricians (including hospitalists) and pediatric subspecialists employed in a hospital staff model. Nearly all medical patients are cared for by general pediatrics residents.

Healing Touch Program

In 2011, a staff nurse (W.A.G.) began working on certification as an HT practitioner and instructor and began performing HT when not occupied by her hematology and oncology nursing duties. In mid-2012, after discussions with the hospital's medical executive committee, she accepted a full-time HT provider position. A number of

nurses and community volunteers subsequently received the 2-day, accredited HT training to increase HT availability.

Providers, including residents, were educated about HT consultations via word of mouth from hospital staff and didactic presentations. Admission welcome packets with HT brochures were distributed to families.

HT consultations required an order in the hospital electronic medical record (EMR) by a medical provider. In 2012, the hospital policy regarding HT consultations changed to allow bedside nurses to order a consultation in the EMR. The patient and family typically met with a medical or HT provider to obtain verbal consent for HT; either patient or family could refuse. When possible, the HT provider performed HT in a dedicated room with relaxing music and low lighting. If the patient could not be moved, HT occurred in the hospital room. The HT provider typically documented in the EMR that the consultation occurred.

Study Methods

After obtaining institutional review board approval, we retrospectively reviewed charts of patients ≤ 20 years of age admitted January 1, 2012 through December 2013. Patients were deidentified and assigned a unique identification number and specific unique hospital admission identification number. We used the rank-sum test, independent samples median test, and multivariate binomial logistic regression (backward Wald) to analyze data for patients with and without HT consultations. We used SPSS software (IBM SPSS Statistics, IBM Corporation) to assess the following variables for all patients: age, gender, duration of hospital stay, number of problems in the admission problem list, patient care location (general inpatient unit, cardiac ICU, PICU, NICU, or BBMT unit), and whether an HT consultation was placed. We calculated odds ratios (ORs) for receiving HT among patients with certain diagnoses such as migraines, cerebral palsy, and seizures. For patients with HT consultations, we documented the ordering physician, assigned each physician an identification number, and compared the number of consultations placed per physician. We also evaluated the number of consultations

placed on subsequent inpatient admissions. For all analyses, statistical significance was set at $P < .05$.

RESULTS

From January 2012 through December 2013, 25 396 hospital admissions occurred. Median age on admission was 5 years. Median length of stay was 1 day. Slightly more than half (54%) of all patients were male. There were 962 HT consultations placed; however, 80 consultations were duplicates within the same admission. Excluding these duplicates, 882 distinct admissions involved an HT consultation (4% of total hospital admissions). The frequency of HT consultations was fairly steady over 2 years; ~200 to 260 consultations were placed during each 6-month period.

The characteristics of hospital admissions with and without HT consultations are noted in Table 1. Patients with an HT consultation had a median age of 12 years (interquartile range [IQR] = 8–16) on admission and a median length of stay of 121 hours (IQR = 70–282). These values were significantly different ($P < .001$) from those of inpatients without an HT consultation (median age 5 years [IQR = 2–12], length of stay 38 hours [IQR = 24–69]). HT consultations were noted to be placed anywhere from the day of admission to day 306 of a patient's inpatient stay; however, the median day for an HT consultation was hospital day 1. More than half (58%) of patients receiving HT were girls, and girls were more likely to receive an HT consultation than boys (OR = 1.4; 95% confidence interval [CI], 1.2–1.7).

Of the 882 admissions that included an HT consultation, 593 individual patients were

represented. Within this group, 123 patients had multiple hospital admissions within the study period and received an HT consultation on ≥ 1 visit. Of the 123 patients with repeated use of HT, 54% received 2 consultations over the study period, 19% received 3 consultations, 11% received 4 consultations, 6% received 5 consultations, and the remaining 10% of patients received 6 to 16 consultations.

Overall, 90% of admissions occurred on our general inpatient unit, with the remainder being admitted to ICUs, the cardiac unit, or the BBMT unit. Table 2 shows the percentage of admissions to individual units and the percentage of admitted patients who received HT. The location with the highest percentage of HT consultations per total admissions was the BBMT unit (56%). Of the patients admitted to the general inpatient medical–surgical units, 4% received HT consultations.

Hematology and oncology or BBMT attending physicians ordered HT consultations most frequently. Together these 6 medical providers ordered 31% of all HT consultations, each placing ≥ 40 consultations. If the ordering provider was a hematology and oncology or BBMT physician, there was a 14% greater likelihood that an HT consultation was placed (95% CI, 11.5–16). The physician who ordered the next highest number of consultations was a pediatric hospitalist who placed 23 HT consultations (3%).

Regarding patients' medical complexity, we found that patients with an HT consultation had a median number of 12 hospital problems on their admission problem list (range 1–49), whereas those without an HT consultation had a median number of

4 items (range 1–53) ($P < .001$). We found that patients with certain conditions such as migraines, pain, anxiety, and constipation were more likely to receive HT consultations (Table 3). Patients with seizures, cerebral palsy, and obesity showed a non–statistically significant trend toward receiving fewer HT consultations.

DISCUSSION

This study focused on patterns of use of HT at our academic children's hospital and characteristics of the patients and providers involved. The study's goal was not to assess the impact of HT on symptoms, pain medication use, length of stay, or costs. Our data demonstrate that certain hospitalized patients use HT frequently and repeatedly. We found significant differences in patients who receive HT consultations and those who do not.

We found that patients who received HT consultations were older and more likely to be female compared with those who did not. We believe that this finding may reflect the fact that older children and adolescents might be more willing and able to express their desire for alternative therapies. As compared with patients without HT consultations, those who received consultations had longer inpatient stays and more diagnoses on their admission problem lists. Providers may have thought that these patients with complex or chronic conditions would benefit more from HT therapy. We were able to associate certain problems with an increased likelihood of receiving an HT consultation, including anxiety, constipation, migraine, depression, and pain. Diagnoses of seizures, cerebral palsy, and obesity were not significantly associated with receiving HT consultations. However, we note our inability to evaluate in the EMR whether a particular diagnosis prompted the HT consultation. We plan to change the HT consultation order in our EMR to include a specific reason for the consultation.

Another limitation to our study is that we could not determine how many HT consultations were placed, but we could not definitively confirm completion of the consultation, even with thorough chart review. Similarly, we may have missed HT consultations that

TABLE 1 Characteristics of Inpatient Admissions to Our Hospital During the Study Period

Characteristic	Without HT Consultation (<i>N</i> = 24 514)	With HT Consultation (<i>N</i> = 882)	<i>P</i>
Median age, y	5	12	<.001
Predominant gender	Male (54%)	Female (58%)	<.001
Median hospital stay, h	38	121	<.001
Median number of problems on hospital admission list	4	12	<.001
Median day of admission when consultation placed	N/A	1	N/A

N/A, not applicable.

TABLE 2 Inpatient Admissions Stratified by Hospital Location

Unit	Hospital Admissions, Total (N = 25 396)		Hospital Admissions With HT Consultation (N = 882)	
	N	%	N	% of Admissions
Medical–surgical inpatient unit	22 776	90	793	4
Cardiac inpatient unit	1684	6.5	23	1
ICU	34	<1	2	6
NICU	326	1	1	<1
PICU	450	2	28	6
BBMT unit	205	<1	115	56

occurred despite the lack of an order, because HT-trained bedside nurses previously did not require an order. We have changed our procedure so that all consultations now require an order.

We found that a high percentage of BBMT patients received HT consultations and that the frequent requesters of HT consultations were hematology, oncology, and BBMT attending physicians. We recognize the bias in this finding, because during the first 6 months of our study period 1 author (W.A.G.) staffed BBMT before changing positions from bedside nurse to full-time HT provider. However, during the remainder of the study period, this bias would probably be less prominent, because she was no longer working solely on that unit, and HT consultations by unit or physician did not significantly change over time.

We found that the frequency of HT consultations over the study period fluctuated less than we anticipated. We

believed that there would be a significant increase in HT consultations over time, as more providers, patients, and families recognized its availability. We plan to continue to analyze data regarding the use of HT consultations, because our institution now includes >160 HT-trained providers. This surge of HT providers resulted from the high demand for HT, which suggests that the frequency has increased since data collection ended. We also note the percentage of patients who received multiple HT consultation orders. Anecdotally we have heard of many patients requesting HT upon admission.

CONCLUSIONS

CAM modalities, including HT, play a role at academic children's hospitals. Young adolescents, girls, hematology and oncology patients, and those with diagnoses such as migraines, pain, or anxiety and depression are likely to receive HT. Recurrent HT consultations suggest that an integrative approach may be particularly important for patients with complex or chronic conditions. Future studies should assess clinical outcomes associated with integrative interventions in hospitalized children.

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TABLE 3 Likelihood That Having a Particular Hospital Diagnosis Was Associated With Receiving an HT Consultation

Diagnosis	Association With HT Consultation	
	OR (95% CI)	P
Asthma	0.8 (0.6–0.9)	.007
Anxiety	2.2 (1.7–2.9)	<.001
Constipation	1.4 (1.2–1.8)	<.001
Depression	2 (1.3–2.9)	.001
Migraine	3 (2.3–3.8)	<.001
Pain	1.7 (1.5–2.1)	<.001

Seizures, cerebral palsy, and obesity were removed from the regression analysis because they were not statistically useful.

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