Journal of Hand Therapy xxx (2016) 1–8

Contents lists available at ScienceDirect

Journal of Hand Therapy

journal homepage: www.jhandtherapy.org

Scientific/Clinical Article

Health promotion, wellness, and prevention in hand therapy: A survey study

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ARTICLE INFO

Article history:
Received 10 July 2016
Received in revised form
11 November 2016
Accepted 14 November 2016
Available online xxx

Keywords:
Health promotion
Wellness
Prevention
Noncommunicable disease
Lifestyle behavior
Hand therapy

ABSTRACT

Study Design: Descriptive study.
Introduction: Noncommunicable diseases including diabetes and cardiovascular disease are associated with increased complications and cost of health care.
Purpose of the Study: To describe beliefs and extent to which hand therapists include health promotion, wellness, and prevention (HPWP) in practice and to elucidate barriers to the incorporation of HPWP.
Methods: A 38-question survey evaluating hand therapists' beliefs, practice of HPWP, and barriers was sent to American Society of Hand Therapists members.
Results: About 270 American Society of Hand Therapists members participated. Respondents believed they had a role in HPWP, including occupational (95%), physical (92%), emotional (87%), and psychological (84%) factors and instrumental activities of daily living management (98%). Physical activity is most frequently addressed (42%), whereas other health behaviors are rarely addressed. Time, patient interest, and resources were among identified barriers.
Discussion: The importance of health promotion and disease prevention practice is being recognized as critical to successful health outcomes.
Conclusion: The study results suggest the need to develop HPWP educational programming for hand therapists and the need to consider expansion of understanding of HPWP initiatives and subsequent benefits to patients.
Level of Evidence: 5.

Introduction

The focus of health care is changing from an emphasis on treating illness and disease to one of preventing disease and promoting health.[1] In the United States, the Affordable Care Act of 2010 expands coverage, establishes preventative care as an essential health benefit, and supports prevention-oriented research.[1,2] The translation of health and prevention knowledge into practice will be dependent on health care providers embracing preemptive care to foster health and decrease illness in their practice.[3]

Noncommunicable diseases (NCDs), including cardiovascular disease, cancer, chronic respiratory dysfunction, and diabetes mellitus, burden the US health care system through increased cost of care, disability, morbidity, and mortality.[4-6] Multiple risk factors are associated with NCDs and are modifiable through lifestyle behavior change. Modifiable risk factors include physical inactivity, high body mass index, elevated fasting blood glucose, poor diet, tobacco use, excessive alcohol use, insufficient sleep, uncontrolled hypertension, and hyperlipidemia.[1-3,6]

National health improvement initiatives have focused on reducing the burden of NCDs through physical activity, weight management, and nutrition to promote health and reduce illness.[7-13] Healthy People 2020,[9] a set of national health objectives, places additional focus on preventable health conditions through the tracking of leading health indicators (LHIs). LHIs are high priority health concerns that are measured to assess the general health of the US population. Trends showing improvement have been noted recently for some LHIs, including physical activity, cardiovascular disease, hypertension, and smoking.[9,14] Yet, further improvement is

No author had association or financial involvement with any organization having a financial interest in or financial conflict with the subject matter or research presented in this article.

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0894-1130/$ – see front matter © 2016 Published by Elsevier Inc. on behalf of Hanley & Belfus, an imprint of Elsevier Inc.
http://dx.doi.org/10.1016/j.jht.2016.11.007

needed especially in the management of diabetes mellitus, obesity, nutrition, and alcohol use.[2] The prevalence of NCDs and their relationships to lifestyle behaviors are well documented in the medical literature; however, there is less information connecting the impact of these relationships to conditions most frequently managed by occupational therapists (OTs) and physical therapists (PTs). Nonetheless, there is compelling evidence describing the influence of NCDs and lifestyle conditions on factors particularly salient to hand therapist practice, including wound healing, integrity of muscle and bone, pain, inflammation, and specific musculoskeletal conditions.[15]

Professional organizations, including the American Occupational Therapy Association, American Physical Therapy Association, and American Society of Hand Therapists (ASHT), have advocated for health promotion and prevention to reduce disease and disability, improve outcomes, and promote wellness in the patients and clients served.[16-18] Health promotion, wellness, and prevention (HPWP) are included in the foundational educational content and scope of practice for both OTs and PTs in the United States.[16,19,20] Initiatives to increase OT and PT participation in this area of practice are ongoing at a professional and practice setting level.[16,20,21]

There is a need for both OTs and PTs to engage in direct intervention, counseling, reinforcing, and coordinating referrals for HPWP in their practice. The knowledge, beliefs, interventions, barriers, and emerging opportunities in HPWP have been described for both disciplines. OT literature focuses on prevention, occupation-based participation, and health management for individuals and populations.[18,19,22-26] The PT literature most frequently addresses physical activity as the primary focus of health promotion.[6,27-34] The roles of OT and PT in diet, weight management, sleep hygiene, stress, and smoking cessation are also supported in the literature.[6,34-40]

Hand therapists represent a confluence of education, beliefs, and practice. Hand therapy is a practice setting where health promotion goals of OT and PT interact and have the potential to enhance the health of individuals and populations. A 2014 hand therapy practice analysis identifies patient health conditions, treatment techniques, and tools associated with hand therapy practice.[41] Many of the conditions treated by hand therapists, including fractures, wounds, scars, and cumulative trauma disorders, are impacted by NCDs and lifestyle behaviors. Assuming that patients and clients receiving hand therapy are representative of the general population and not exempt from the influence of NCDs on their health, hand therapists encounter patients with chronic health conditions daily.

HPWP interventions have been shown to be effective in the management of NCDs by reducing risk factors and complications, resulting in diminished burden on the health care system and improved quality of life.[9] Opportunities exist for hand therapists to impact individual and population health by integrating HPWP into daily practice to address lifestyle behaviors, including cigarette smoking, diet, weight management, sleep hygiene, stress, and alcohol use. Hand therapists, like all health care providers, should consider every patient encounter to be an opportunity for health promotion.[42] There is an increasing need for hand therapists to assume an active role in HPWP at the individual level to support population health due to the changing payment landscape.[43,44] Because multiple visits over an extended period are typical in hand therapy practice, hand therapists are in a unique position to support health behavior change through HPWP.

Currently, there are no studies available that provide data specific to the HPWP beliefs and practices of hand therapists. The primary purposes of the survey are to describe the current beliefs and the extent to which hand therapists include HPWP in the care of patients with upper extremity disorders and to elucidate the barriers to the incorporation of HPWP in hand therapy practice.

Methods

Development of the survey

A questionnaire was developed to collect descriptive information related to HPWP beliefs and practices among hand and upper extremity rehabilitation providers. The survey questions were adapted from multiple sources reported in the literature addressing health promotion attitudes and beliefs, areas of HPWP in rehabilitation therapist practice, and Behavioral Risk Factor Surveillance System data reporting healthy lifestyle characteristics in the US population.[6,27-29,31,34,45,46] The survey results reported here consisted of 4 primary sections that gathered information on participants' demographics and credentials, professional practice information, beliefs related to HPWP, and professional wellness practice. The questions were posed in a multiple-choice format with several allowing free text for further clarification. To establish content validity and verbiage consistent with contemporary care, a colleague in the Department of Public Health with a PhD in Health Promotion and Wellness reviewed the initial survey and made recommendations to modify wording of a few questions to improve clarity. All suggestions were incorporated into the final 38-question survey before its submission to the institutional review board. The researchers tested and approved the usability and technical functionality of the electronic questionnaire before distribution. To improve the ease and length of the survey, certain questions were displayed conditionally based on the participant's previous answers. Please refer to the Appendix for a complete copy of the survey.

Survey administration

The closed survey was delivered electronically to a convenience sample of all ASHT members with e-mail addresses on file through SurveyMonkey (SurveyMonkey, Palo Alto, CA). The survey was electronically distributed on 2 occasions, 6 weeks apart in December 2015 and January 2016, in attempts to improve the response rate. Informed consent, including information regarding confidentiality as well as the length and purpose of the survey along with a link to the survey, was included in the e-mail that was administered by ASHT personnel. ASHT members were included in the study if they agreed to participate in the survey and were excluded if they were currently involved in direct patient care less than 16 hours per month. To minimize multiple entries, the survey was only able to be taken once from the same device. All personal information and data were collected on a voluntary basis and were protected using Health Insurance Portability and Accountability Act–compliant software features of the SurveyMonkey Platform. No incentives were offered to participants to complete the study. This study was approved by the Mercer University Institutional Review Board.

Data analysis

Descriptive statistics, including means, standard deviations, frequencies, and percentages, were used to report all survey findings. Results are reported in mean (standard deviation), unless otherwise noted. Kruskal-Wallis H test and Mann-Whitney U test were used to examine any differences in median responses between groups.

Results

Surveys were sent to a total of 3037 ASHT members. There were 65 e-mails that were undeliverable, and only 875 e-mails were opened (875 of 2972 = 29%). A total of 270 ASHT members responded to the survey, and the response rate was calculated to be