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Communication study

Extending Physician ReACH: Influencing patient activation and behavior through multichannel physician communication

Christy J.W. Ledford [a,b,*], Christopher C. Ledford [b], Marc A. Childress [b]

[a] Department of Biomedical Informatics, Uniformed Services University of the Health Sciences, Bethesda, USA
[b] Department of Family Medicine, Fort Belvoir Community Hospital, Fort Belvoir, USA

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ABSTRACT

Objective: Despite evidence-based recommendations, physical activity as a self-management technique is underutilized. Many physical activity interventions require significant resources, ranging from repeated phone follow-up with nursing staff to intensive sessions with cooperating physical therapists. This intervention, Extending Physician ReACH (Relationship And Communication in Healthcare), examined physician to patient communication tactics for promoting walking exercise to patients with type 2 diabetes, using limited clinic time and financial resources.
Methods: This was a single-site, six-month prospective intervention, which implemented theoretically driven, evidenced-based information factor strategies. Of the 128 volunteers who participated in the initial clinic visit, 67 patients with type 2 diabetes completed the six-month intervention.
Results: Significant intervention effects were detected risk perception, social norms, and patient activation.
Conclusions: This study was designed to identify information factors that could affect physician success in motivating patients with type 2 diabetes to enact the ADA physical activity recommendations.
Practice implications: The success of this intervention models a strategy through which clinicians can reach beyond "one-shot" persuasion without placing onerous time and resource demands on physicians.
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1. Introduction

An estimated 25.8 million people or 8.3% of the American population have diabetes [1]. However, through regular exercise, diagnosed type 2 diabetics can directly improve blood sugar control [2,3]. Studies have established the efficacy of exercise interventions to affect behavioral and physiological outcomes [2–7]. Current clinical guidelines recommend that physicians advise diabetic patients to perform 150 min per week of aerobic activity [8]. These recommendations provide as benefits improvement in blood glucose control, reduced cardiovascular risk factors, weight loss, and improved well-being. Specifically, with regard to the messages promoted in this study, 150 min of exercise weekly can lower glycosylated hemoglobin (A1c – the standard measure of average blood glucose level) by 0.66% [9]. Despite the American Diabetes Association (ADA)-endorsed, evidence-based recommendations, physical activity as a self-management technique is underutilized [4].

Varied attempts to improve patient compliance with exercise recommendations have shown mixed results. Many of these interventions have required significant resources, ranging from repeated phone follow-up with nursing staff to intensive sessions with cooperating physical therapists [10–12]. This high degree of investment in many of these programs can limit their eventual utility in the clinical setting, considering the time and support constraints typical of a primary care encounter and the difficulty in effectively maintaining follow-up and reinforcement of recommendations [13]. The following study intervention, Extending Physician ReACH (Relationship And Communication in Healthcare), examined physician to patient communication strategies for promoting walking exercise to patients with type 2 diabetes assigned to primary care clinics.

Drawing on the Integrated Change (I-Change) Model [14,15], a model derived from the attitude-self-efficacy model, the Physician ReACH intervention implemented theoretically driven, evidenced-based information factor strategies. The I-Change model posits that an individual's intention to enact the prescribed behavior (walking exercise) is determined by three factors: attitudes, social influences, and self-efficacy expectations, which are in turn determined by distal factors, including awareness factors (knowledge, risk perception, and cues to action), predisposing factors (behavioral, psychological, biological, and social/cultural), and

* Corresponding author at: 4301 Jones Bridge Road, G058D, Bethesda, MD 20814, USA. Tel.: +1 301 295 2158; fax: +1 301 295 3585.
E-mail address: Christian.ledford@usuhs.edu (Christy J.W. Ledford).

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information factors (quality of messages, channels and sources used) [14]. Physician ReACH targeted distal information factors in an effort to effect change in awareness factors and motivation factors. The information factors utilized here included: physician as source; multiple, patient-centered messages; and channel complementarity and mode redundancy.

While patient behavior was the primary outcome of this intervention, patient activation was the secondary outcome. Absent from the I-Change Model, patient activation as a variable reflects the awareness factor of knowledge, the motivation factor of confidence, and the ability factor of performance skills. The activated patient believes that his or her role as a patient is important, that he or she has the confidence and knowledge necessary to take action, that he or she enacts behaviors to maintain and improve his or her health, and that he or she continues behaviors even under stress [16–18]. In the context of chronic disease, activated patients recognize that they are responsible for their own care, which motivates them to seek disease-related information and support to enable self-management. These patients take action, ask questions of the provider, and participate in decisions about treatment [19–21]. They are collaborative partners with the provider in their health care [17]. Patient activation is especially critical in chronically ill patients as they follow complex treatment regimens, monitor their conditions, and make lifestyle changes [22].

While most clinicians are less familiar with the formal concept of patient activation, they have long seen presumed correlates of patient activation as significant factors in effective chronic-disease management [23]. Issues such as low medication compliance [24,25], limited follow-up care [26], and poor patient–provider communication have been well documented as impediments in the care of chronic disease states. Specifically in the context of clinic communication, physicians communicate differently with patients who they perceive to be more active in clinic interactions [27]. Interventions, including educational programs [28], care coaching [29], and motivational interviewing [30], have attempted to increase physician perception of active patients with varied success. Bodenheimer [31] recommends "pre-activating" patients prior to clinical encounters, which tangibly includes rigorous follow-up and active, targeted communication from the healthcare team.

2. Methods

This was a single-site, six-month prospective communication intervention, which implemented theoretically driven, evidenced-based information factor strategies. The setting for the intervention was an East Coast metropolitan training hospital, in which the family medicine clinic provides primary care to more than 30,000 patients. The intervention was delivered on-site as part of regular health care and focused on patients with type 2 diabetes since this type accounts for about 90–95% of all diagnosed cases of diabetes in adults [1]. Additional inclusion criteria were age (between 40 and 80 years of age) and absence of contraindications for exercise.

2.1. Theoretical basis and core concepts for intervention design

Drawing from I-Change model, the three information factors were addressed to affect motivational factors for behavior change. See Fig. 1 for the timeline of intervention messages disseminated to patients.

2.1.1. Source factors

Physicians were engaged as the information source. Patients trust physicians and select them as their preferred source of health information [32,33]. Moreover, physician credibility, a combination of perceived trust, expertise, and caring, is a critical source factor related to patient satisfaction and outcomes [34–38]. This intervention intended to leverage patient preference and physician credibility in its selection of physicians as the primary source of promotive health information.

Twenty family-medicine physician co-researchers were recruited and trained, including one-on-one interviews from message development and a group training presenting theoretical underpinnings and resultant messages.

2.1.2. Message factors

The intervention disseminated multiple, patient-centered messages. The central Physician ReACH message was designed according to patient-centered communication [39] and shared decision making [40,41] principles, to include presentation of the physical activity recommendation, reasons and potential effects of the behavior, tactics for incorporating the behavior, and goal setting. In message development, researchers pre-tested study messages and worked with physicians to design realistic, evidence-based messages. The resulting message included: (1) taking a patient assessment, (2) describing diabetes, (3) establishing the need for exercise, (4) presenting exercise recommendations, and (5) setting goals with the patient. The central exercise message was the ADA recommendation to walk 30 min a day five days a week. These messages were designed to increase patient knowledge about the effects of walking on diabetes, to advance

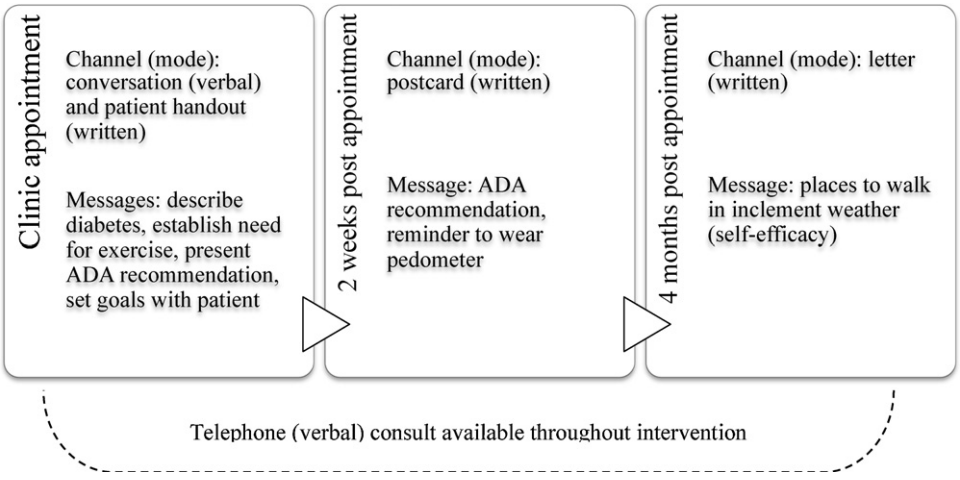

Fig. 1. Patient intervention timeline.