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Linda Yarrow

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HEALTH COMMUNICATIONS

Becoming Social Media Savvy

Using Web 2.0 to Enhance Education

Linda Yarrow, PhD, RD/LD, CDE

Health educators empower individuals with knowledge to improve health. In addition to traditional teaching methods, social media, such as Wikis, blogs, Twitter, Facebook, and YouTube, can be used. Information is available from social media outlets 24 hours a day, 7 days a week. Through social media, clients receive professional opinions as well as real-world information and emotional support from others dealing with similar health situations. Helping patients connect with others as a support system and educational resource should be part of the patient prescription for total care. **Key words:** *education, online health, social media, Web 2.0*

EFFECTIVE EDUCATION of clients is critical to the success of registered dietitians (RDs) in helping patients achieve improved health status. The primary method of education has been face-to-face contact between the client and the RD. This mode of communication will likely remain the mainstay of health and nutrition education, but it is important to recognize that there are many other avenues that can be explored to enhance education. This article reviews the use of social media in health education and describes methods used by the author that involve social media for enhancing education of clients.

Marvin Minsky, an MIT scientist, stated, “You don’t understand anything until you learn it more than one way.” Educators have a responsibility to identify multiple ways that clients can learn information, including social media in today’s society. There are 3 basic types of learners: visual, auditory, and kinesthetic.¹ Visual learners learn by seeing

and visualizing. Effective strategies for this type of learner will include visually pleasing materials that paint mental pictures. Auditory learners prefer to have concepts explained to them rather than having to read written materials. They prefer organized conversations. Kinesthetic learners learn by doing and solving real-life problems. They select hands-on approaches to learning, and learn by trial and error. All 3 styles of learning can be enhanced using social media. The social media outlets discussed in this article are Twitter, Facebook, YouTube, Wikis, and blogs.

Internet usage for health information has been explored by the Pew Research Center’s Internet & American Life Project. They found that the typical adult who looks for health information online is female, white, 18 to 29 years of age, and a college graduate² (Table 1). Of the 74% of adults who use the Internet, 80% of users have looked online for information about health topics. These Internet users identified blogs, Web sites, videos, and social network sites such as Facebook as sources of health information³ (Table 2).

SOCIAL MEDIA AND HEALTH INFORMATION

As electronic access models are developed, more people will have the ability to track their health conditions. Standard practice by RDs is

Author Affiliation: *Department of Human Nutrition, Kansas State University, Manhattan; and Clay County Medical Center, Clay Center, Kansas.*

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Correspondence: *Linda Yarrow, PhD, RD/LD, CDE, Department of Human Nutrition, Kansas State University, Manhattan, KS 66506 (lyarrow@twinvalley.net).*

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Table 1. Demographics of Internet Health Users: The Percentage of Adults in Each Demographic Group Who Look Online for Information About Health or Medical Issues

All Adults	59%
Gender	
Men	53%
Women	65%
Race/ethnicity	
White (non-Hispanic)	63%
African American (non-Hispanic)	47%
Hispanic	45%
Age, y	
18-29	71%
30-49	66%
50-64	58%
65 +	29%
Education	
Less than high school	24%
High school diploma	45%
Some college	70%
College graduate	81%

to have clients whom they counsel keep food and exercise records. Clients may prefer to track their health routines on the Internet. According to the Pew survey, 27% of Internet users (20% of adults) have tracked their weight, diet, physical activity, or other health indicators online.³ Adults who use social media sites such as Facebook are using these sites to follow another person’s health experiences, glean health information, and ask ques-

Table 2. Internet Users’ Health Activities (74% of Adults Use the Internet)

Internet users who look online for health information	80%
Have read blog, Web site, or newsgroup about someone else’s health issues	34%
Watched an online health video	25%
Gone online to find others with similar health concerns	18%
Adults who have tracked weight, diet, or exercise routine online	27%

tions or post comments about health conditions (Table 3). According to the Pew report, 2 forces are driving the online health conversation: the increased availability of social media tools and the motivation of people living with chronic conditions to connect with each other.

How can health care professionals assist people in connecting with and learning from each other? Health care professionals should explore various social media and become familiar with offerings so that patients can be directed to relevant sites. Eighty-three percent of Internet users living with at least 1 of 5 chronic conditions stated that they have looked online for health information. When concerns involved technical questions related to health, users sought out health care professionals. When concerns involved personal or coping issues, most adults preferred nonprofessionals.² Can social media combine both professional and nonprofessional resources to meet patients’ needs for education as well as support systems and coping methods?

What are the advantages and disadvantages to using social media for health education? Social media offers a method of communication that is fast and inexpensive and may increase adherence to treatment plans. The information may have a deeper level of personalization through individual stories that others relate to from their own experiences. Through social media, health care

Table 3. Activities of Internet Users Who Use Social Media Sites

Adults who use social network sites	62%
Followed a friend’s personal health experience	23%
Gained health information from social network site	15%
Draw attention to health-related issues	14%
Posted comments, questions, or information about health matters	11%
Started or joined health-related group	9%

professionals are able to reach a larger and more diverse audience. In addition, consumers can be active learners by both producing and distributing information through collaborative writing and content sharing.⁴⁻⁹ Social media may increase access to credible, science-based health messages.¹⁰ Disadvantages include health misinformation, risks to individual or organizational reputation, and individual privacy issues.^{4,11} Health care professionals should prompt clients to be skeptical about social media content, because not all information that they read online will be helpful or apply to them. This caution can be an opportunity for health care professionals to correct misconceptions about health issues.

Studies relevant to the use of social media in health education have been conducted in the fields of pharmacy, medical training, library and information sciences, health communications, and health education and promotion.^{11,12} Authors have published literature reviews summarizing current evidence of using social media for health promotion. They determined that social media could be a powerful tool with a large reach and high level of interactivity that facilitates lay information, and sharing and retrieval of data. It was determined that there are risks of information overload and tracking meaningful impact is difficult. In addition, there is concern about the reliability of information.^{12,13}

Health educators most commonly used social networking sites, podcasts, and media sharing sites to communicate with their clients.¹⁴ Health educators also indicated that using social media for education would enhance their job performance. A medical training curriculum included the integration of Twitter, YouTube, blogging, and Skype in 2 courses offered to medical students. Students rated the courses highly and indicated that social media techniques assisted learning of content and collaboration among students.¹⁵ In a study investigating the use of social media for asthma care, physicians identified benefits as being improved patient-provider relationships, interactive venues, and additional avenues to provide accurate information.¹⁶

Social media was used to enhance the delivery of health and fitness information to college students. Students claimed that access to nutrition and exercise information via social media sites enhanced their knowledge acquisition. They reported that they learned from their peers and stated that Facebook forums could be a valuable long-term resource for sharing and discussing health information.¹⁷ A review of how older adults are accessing health information reported that they as a group are increasing their use of the Internet for this purpose.¹⁸ There is an abundance of informal health conversations and organized health-related activities on the Internet that reflect an acceptance that social media tools are necessary to reach individuals who are abandoning traditional broadcast techniques and that a segment of the public seems to be changing in how they interact with experts.¹¹

WIKIS

Wikis are a type of social media that encourage social interaction/support, collaborative learning, and information sharing. Wikis can be a powerful online source for creation and sharing of information. However, attention to information validity is important.¹⁹ It is structured by an author setting up the initial Wiki Web site and inviting members to collaborate on information sharing. The author chooses whether the public can view the Wiki or if it is open to identified members only, and whether viewers can contribute to the Wiki or only view the site. If members are able to contribute, they can become actively involved in construction of the Web site content. Communication is asynchronous so that members may contribute at any time of day.

The development of a Wiki site for a diabetic support group is one example. The leader could post information from meeting presentations, calendars with future meetings, new research relating to diabetes, and recipes. A discussion page could be created where members are encouraged to ask questions on the site and to contribute recipes,

experiences, and other observations. The discussion page helps members stay connected between meetings. Another example is a weight loss challenge. The Wiki could include members who encourage and support each other, share weight loss strategies, and serve as “cheerleaders” or “champions” for the group.

Wikis can be used for dietetic student education. For example, assigning groups of students to a specific disease state and providing guidelines on what information should be provided could be accessed on a Wiki site. From the author’s experience, both clients and students have been receptive to developing and using Wikis. Clients report that they like being able to access information from the meetings when they need to refresh their memory and enjoy sharing recipes and diet tips. Students report that the Wikis were dynamic and engaging, made them dig deeper into researching and learning, and served as a resource to use for future assignments. Wikis could also be used for information sharing among colleagues and community outreach. There are many Wiki host providers to choose from, some of which are free and some that charge a fee, depending on how much support is needed.

BLOGS

A growing trend in social media is the use of blogs. Blogs are an effective method to disseminate opinions and information and discuss facts, impressions, and even myths that spread through the “blogosphere” of interconnected networks through blog links. Persons with chronic health conditions value online sources like blogs that detail another individual’s experience with a health condition.²⁰ Health care institutions and many health care providers are developing blogs to provide community education and outreach.

Blogs have influenced purchasing behavior positively²¹; however, no studies to date support whether or not blogs change health-related behaviors. Studies of patients with can-

cer have shown that expressive writing has therapeutic benefits that help to reduce anxiety and depressive symptoms.²² Encouraging clients to start their own blogs and to read blogs of persons with similar conditions may help increase their health awareness and motivate them to change and should be studied.

My students develop a personal blog that focuses on a health topic. Students in my classes kept blogs for 2 months and reported that writing their blogs forced them to investigate certain topics and to become more knowledgeable about them. They also stated that they enjoyed communicating about health on a relaxed, more social level. Some weight-loss clients in my practice blog about their weight loss journey. One client reported that the blog made her feel accountable because she knew others were watching her progress. She also enjoyed the opportunity to visit blog sites of other women with the same goal and stated that she received motivation from reading about others’ experiences. An individual with type 1 diabetes reported that she did not feel so alone once she started visiting some blog sites of people who were dealing with the same issues that she had been facing. She stated that diabetes was a lonely disease until she linked up with others through her blog. By reading and responding to other bloggers, clients have the opportunity to develop an online support group with people who understand similar challenges and everyday situations. The majority of blog hosting sites are free and easy to navigate for persons with low technological skills.

TWITTER

One of the fastest-growing social network sites is Twitter. Twitter is a place for discovery and for conversational snippets that allows persons to send short text messages up to 140 characters. Whether or not Twitter can influence behavior is unknown at this time. Twitter helps direct people to content that can have ability to influence—articles, reviews, news, blog posts, Facebook pages, YouTube videos, podcasts, user forums, etc.

The Centers for Disease Control and Prevention (CDC) has developed best practice guidelines for using Twitter.²³ When setting up a Twitter account, know your reasons for using it and clearly define the objectives. Personal or professional use should be clarified and content highlighted to encourage awareness of an issue. Messages should be designed to resonate with target audiences and prompt them to take action. Each Twitter post should stand alone and contain all necessary information. While keeping content short and simple for easy “retweeting,” CDC recommends weekly tweeting to gain active and engaged followers.

Separate Twitter accounts are recommended for different purposes, for example, clients in specialty groups, such as diabetic, cancer, or weight loss support groups. Tweets can be sent to students or clients about news articles, TV shows, books, videos, and Web sites. Thought-provoking questions or inspirational quotes can be discussed at a later time in support groups or classrooms.

FACEBOOK

The most recognizable social network site is Facebook. According to Pew, 92% of social network site users are on Facebook.²⁴ Facebook builds support systems. Many health care providers are using Facebook to answer common client questions, which has reduced the number of phone calls to their offices.²⁵ Health care providers also use Facebook pages to educate on current news making topics such as swine flu, heart failure, heat stroke, and childhood obesity. For some clients, Facebook is the preferred method of communication because data and messages can be sent and read quickly.

Best practices include clearly defined objectives for a Facebook page, identification of a target audience, short and easy-to-read text, use of accessible video files, and self-promotion of your Facebook page.²⁶ When creating Facebook accounts, decide whether to keep private accounts separate from profes-

sional accounts. Client confidentiality should be maintained since health care providers should never discuss a client’s personal information on Facebook. Facebook pages for specialty groups such as weight loss, diabetes, respiratory, and cardiac support groups can be created. Facebook pages are different from individual Facebook profiles in that they do not have an index or messaging capabilities.

Facebook offers an opportunity to create discussion forums where members can exchange ideas and discuss strategies for success, giving them the opportunity to bond and create support systems to help achieve their health goals. You can also create fan pages to promote an organization or professional expertise. There is a Facebook game called HealthSeeker, which could be promoted.²⁷ The game sends health-minded players on daily missions aimed at eating well, managing diabetes, losing or maintaining weight, and reducing the risk for heart disease. HealthSeeker can provide necessary lifestyle coaching between health care provider visits. Facebook friends can encourage and support each other via HealthSeeker.

YouTube

YouTube is the largest collection of videos on the Internet. More than 24 hours of video are published every minute.²⁸ According to the Centers for Disease Control and Prevention, “The power of YouTube to disseminate tailored health education and health communication messages cannot be underestimated.”²⁹ Online videos contain content that Internet users enjoy sharing.³⁰ Forty percent of Internet users have shared educational videos that can enhance learning, particularly for visual and auditory learners. Videos could be assigned as “homework” to reinforce concepts taught by health care providers.

My experience with online videos on insulin injection and on the use of blood glucose monitors to reinforce the teaching provided to clients has been beneficial in

my practice. Video links to enhance their knowledge about diseases such as Crohn's disease, kidney failure, heart disease, and diverticulitis also have been provided. It is critical to evaluate who the provider of the video is so that you are providing a nonbiased resource and self-made videos can position you as the expert. Best practices for self-made videos include tailoring your message for a specific audience and keeping the message simple, short, and engaging.²⁹

GOVERNMENT WEB SITES

Interactive Web sites have been tested and are well established. The President's Challenge for Fitness is one example.³¹ The purpose of the Web site is to empower people to improve their health by making changes in diet and physical activity. Members track their activity levels and can earn awards, such as the Presidential Active Lifestyle Award. Clients can participate as individuals or as part of a group, to inspire and support each other in

establishing and maintaining regular physical activity.

In conclusion, social media can provide information and valuable emotional support through blogs, Wikis, Twitter, YouTube, and Facebook. Health and nutrition educators should help their clients connect with these valuable resources. VADM Micheal Cowan, Surgeon General of the Navy, has stated: "To get medical assistance, do research on the Internet, consult a social network (or join a new one), IM or e-mail physician(s), consider the advice of all, make a consensus decision, and have a prescription delivered to the front door at least as quickly as a pizza. Time elapsed: minutes to hours."^{32(p380)} In addition, he states "... our patients will lead us to the health information revolution if we should choose not to go there ourselves." If the goal is to empower individuals with knowledge to improve their health, helping patients connect with social media educational resources and interact with others in a support system should be part of the patient prescription for total care.

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